

The Chinese company said it expects W. Power, which is engaged in investing in and developing wind projects in Bulgaria, Romania and other Eastern European countries, to help facilitate further opportunities for Ming Yang International. "This represents a significant milestone for Ming Yang's overseas market development, in extending our footprint in mainstream European markets," said Chuanwei Zhang, chairman and chief executive officer.

## IFC to fund SunEdison PV project

The International Finance Corporation is considering arranging debt financing totalling €90 million for a 60.4-MWp solar photovoltaic power plant at Karadzhalovo in the southern Bulgarian region of Plovdiv, which is being developed by a wholly-owned subsidiary of US-based global solar PV project developer and operator SunEdison.

The IFC, a member of the World Bank Group, said in a summary of proposed investment (SPI) issued late January that its proposed investment would be in the form of an A loan of up to €45 million and a B loan of up to €45 million to be provided by UniCredit Bank Austria. The total project cost is estimated at €181.4 million, including VAT. The IFC said that it will make available financing to complete the project's financial plan, against "a backdrop of highly constrained capital markets". "IFC's experience in the sector, and B loan cover will provide comfort to commercial participants, given regulatory risk in Bulgaria," it added.

Construction of the 50 MW-AC effective Karadzhalovo plant, on a site covering about 100 hectares in the municipality of Parvomay, started in September 2011 and is expected to be completed this spring.

The project is 100% owned by ZBE Partners EOOD, a special purpose vehicle that is wholly-owned by SunEdison, which in turn is owned by MEMC Electronic Materials, a US-based manufacturer of semiconductors and silicon wafers. Sun Edison acquired the project site from former owner Interzona Plovdiv in September 2011.

The construction of the project, which will comprise 42 PV blocks, is being undertaken by SunEdison Spain Construction as the Engineering, Procurement and Construction (EPC) contractor and two main subcontractors – Sienit as general subcontractor, and ABB, which is building a 20/110-kV substation and the 7.5 km 110-kV underground transmission line.

Each block of variable capacity will consist of a number of PV modules, made up of either mono-crystalline or polycrystalline solar cells, grouped in strings and connected to an AC/DC inverter transformer station. The 42 inverter stations will be connected through an internal 20-kV underground network in a ring configuration to a new 20/110-kV substation.

Power will flow through the 110-kV transmission line to NEK's Borisovgrad substation. All output will be sold to the national electricity company, NEK, under a

20-year PPA that will provide for a fixed feed-in tariff, expected to be Lev 485.6/MWh (€248.3/MWh), according to the IFC's SPI.

Environmental legal due diligence on the project was carried out by the US law firm Wolf Theiss, while Germany's consultancy Fichtner GmbH + Co KG has acted as the lender's technical advisor.

## Czech Republic

### CEZ offers Chvaletice to Czech Coal

CEZ's 800-MW East Bohemian Chvaletice power plant is reportedly a new pawn in the negotiations with local mining group Czech Coal over a long-term supply deal between the companies, according to a report by the Czech business daily *Hospodarske Noviny* on January 31.

Both CEZ and Czech Coal confirmed to *Platts* that talks over a new coal deal are ongoing but were not willing to go into specifics. The two groups have been in dispute over a long-term supply deal hammered out in 2005 but which was never implemented, with CEZ later accusing the mining company of breach of contract.

*Hospodarske Noviny* pointed out that with shorter term supply contracts for CEZ's 1,200-MW Pocerady plant due to expire by year-end both companies are now under pressure to clinch a deal. The Pocerady plant was previously reported to be on offer to Czech Coal in return for a supply deal that might pave the way for CEZ to push ahead with stalled plans for a new coal-fired power plant at the site.

Chvaletice's entry into the negotiations would, in one respect, not be a surprise. CEZ has long been seeking to offload the loss-making East Bohemian plant which lies far from local coal fields. The plant has been spun off from the group's other production assets to better analyze costs and was previously earmarked for transfer to Czech power group Energeticky a Prumyslovy Holding (EPH) under a swap deal for the Energotrans combined heat and power plant near Prague. That deal fell through, apparently over fears over long-term coal supplies.

Offloading Chvaletice now, especially to Czech Coal, the source of numerous complaints to the European Commission over CEZ's alleged abuse of dominant position and blocking new entrants to the Czech market, could also help CEZ convince the local competition office that the Energotrans acquisition is not a step too far.

The local competition watchdog, with the European Commission in the background, launched an in-depth probe into CEZ's planned acquisition from EPH of the 352-MW CHP plant. The result of the five-month probe, which was launched last October and focused on CEZ's dominant position on the Czech power production market, is still pending. "We assume that one of the reasons why CEZ is trying to offload Chvaletice is to reduce its market concentration following the EU Commission's raid in November 2009 and in anticipation

that approval of the Energotrans transaction may be conditional on CEZ divesting some of its generation assets," Jan Ondrich, a partner at Prague-based energy consultancy Candole Partners told Platts February 7.

Ondrich, however, cast some doubts on whether the ploy might work. "Chvaletice had some of the highest variable costs among CEZ's power plants and as such is on-line for a limited number of hours per day, to supply peakload. Energotrans, on the other hand, mostly supplies baseload output, with some peakload. Therefore, the net effect of the transaction still increases concentration."

On the other hand, he says Czech Coal might not see the plant as such a liability as CEZ. "Czech Coal is already transporting coal to Opatovice [the EPH-owned power station] which is near Chvaletice, and may be willing to accept the transport costs to Chvaletice to move into the generation business, which is something they have been seeking to do as a way to reduce dependence on demand from CEZ and EPH," he commented.

Czech Coal last month confirmed grid approval for a new 660-MW coal-fired power plant in the north of the country at the cost of around Koruna 30 billion, which could start power production by 2021. The plant's capacity is around half that originally planned (*EiEE 231/1*).

## CEZ selects financial advisor for Temelin expansion

CEZ has selected BNP Paribas in a tender to help it find a partner, or partners, for funding the construction of further two reactors at its current Temelin nuclear power plant.

Spokeswoman Eva Novakova told Platts February 7 that the French bank made the best offer to help draw up financing plans and sound out possible partners for the estimated K200 million (€8 billion) expansion of the plant.

CEZ CFO Martin Novak said last month that the Czech state-controlled power producer could offer partners a 50% stake in the project to one or more strategic investors if the power group opted not to make full use of its own resources and loans to fund Temelin's expansion.

Novakova said CEZ will prepare financing options with its newly selected consultant, one of the key reference points being the offers to be submitted by the three prequalified bidders – Westinghouse, Areva, and the joint venture between Russia's Atomstroyexport and Skoda JS. Final offers by the three bidders should be made by July 2 and the selection of a winner by the end of 2013.

CEZ has in the past been upbeat about the possibilities that it could fund Temelin's expansion through its own funds and loans, admitting though that Czech state guarantees would be needed to help provide a sound financial basis for the project. What sort of government guarantees might be offered is still not

clear. CEZ chief executive Daniel Benes and the government's appointee to oversee Temelin's expansion, Vaclav Bartuska, have praised the proposed British model of guaranteed fixed prices for nuclear-produced electricity, with the state making up the difference if market prices are lower and pocketing the surplus if higher than the promised price.

## Demand slips but production rises

Czech net electricity production rose by 1.6% year-on-year in 2011 to 81.03 TWh, despite a slight decrease in domestic demand, according to full-year figures published February 3 by the regulator, ERU.

Domestic demand fell to 58.63 TWh from 59.26 TWh in 2010, it said.

The biggest increase in production was from renewables, which totalled 2.5 TWh against 0.95 TWh a year earlier. Coal-fired power production fell slightly to 45.18 TWh while nuclear output rose marginally to 26.71 TWh compared with 26.44 TWh in 2010.

Electricity exports, meanwhile, rose last year to 17.04 TWh from 14.98 TWh in 2010. Grid operator CEPS said that around 50% of exports flowed to Germany with 37% sold to Slovakia and 22% to Austria.

## Georgia

## Bids to revamp Vardnili Cascade

Georgia's state hydropower plant operator Engurhesi has invited pre-qualification applications by February 15 to provide civil works, electrical equipment, monitoring, and hydro-mechanical works for the rehabilitation of two plants in the four-plant 245-MW Vardnili Cascade on the Enguri River.

The Vardnili Cascade, comprising the 125-MW Vardnili 1 and Vardnili 2, 3, and 4 of 40 MW each, was built in the 1970s along with the 1,250-MW Enguri as part of the same scheme. Three plants were destroyed during the civil war.

In the first of four solicitations, Engurhesi invites applications for pre-qualification to carry out civil works at Vardnili 1 dam and waterways. Work, to be performed over 18 months, includes rehabilitation of the diversion channel, reinforced-concrete lining of the spillway channel, rehabilitation of the initial part of the tailrace channel, and stabilization of a landslide slope of the downstream channel with reinforced concrete structures.

In the second tender, Engurhesi seeks the refurbishment and upgrading of electrical equipment at Vardnili 1 over 18 months. In the third tender, applications are invited to supply and install a monitoring system on Vardnili 1 Dam. In the final tender, Engurhesi invites bids to rehabilitate hydro-mechanical equipment at Vardnili 1 and Vardnili 2.

For bidding documents and further information, contact: Malkhaz Tskvitishvili, Engurhesi Ltd., Project Implementation Unit, 8 Politkovskaia Str., Tbilisi 0186; Tel.: 00 995 32-2188011; E-mail: malkhaz@caucasus.net