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Global Transmission Weekly

Update on the global electricity transmission industry

INSIDE THIS ISSUE

NORTH AMERICA

Vermont PSC approves New England Clean Power Link project

The Public Service Commission (PSC) of Vermont has approved the New England Clean Power Link project, which has been proposed by TDI New England (TDI-NE). The developer filed its application with the State PSC for the construction of the project in December 2014. As per estimates of the company, over its 40-year life, the project will create approximately USD1.5 billion of total economic benefits to the state and its residents. The project is yet to receive federal approval.

The project was announced by TDI-NE in October 2013. It includes the construction of 1,000 MW high voltage direct current (HVDC) (underwater and underground) transmission line, which will deliver clean, low-cost energy from Canada to Ludlow, Vermont and the broader area of New England. Under the project, about 150 miles (241 km) of line will be constructed from the US-Canadian border to Vermont. About 100 miles (161 km) of transmission line will be buried under Lake Champlain, with the balance buried underground along existing rights-of-way (RoW). The line will end at a converter station to be built in Ludlow, Vermont, and interconnect with Vermont Electric Power Company's (VELCO) transmission system.

The USD1.2 billion project will be financed by the developer entirely and will not cost the ratepayers anything.

ALJ recommends approval for Great Northern Transmission Line project

An administrative law judge (ALJ) with the Minnesota Public Utilities Commission (PUC) has ruled on January 4, 2016 that Minnesota Power satisfied the criteria for the issuance of a route permit for the Minnesota portion of the Great Northern Transmission Line. Supporting this, the ALJ has also recommended that the PUC grant the route permit for the project with a few variations on Minnesota Power's proposed route.

The project proposes to transport hydroelectric power generated by Canadian power utility Manitoba Hydro to regions of Minnesota and the upper Midwest in the United States. It will be developed in two phases. Phase 1 includes a 220 mile (354.2 km), 500 kV transmission line from the Canadian border to the Blackberry substation in Minnesota's Iron Range, which will be constructed by Minnesota Power; and Phase 2 entails the construction of a 50-70 mile (80-113 km), 345 kV double-circuit line between the Blackberry substation and the Arrowhead substation near Hermantown in Duluth in Minnesota, which will be constructed by Minnesota Power and ATC. The latter two will also work together to study other transmission upgrades in Wisconsin to facilitate the transfer of renewable energy in the region.

In November 2015, ALLETE, the parent company of Minnesota Power, received the final environmental impact statement (EIS) from the US Department of Energy (DoE) and the Minnesota Department of Commerce (MDC) for the project, which followed a certificate of need from the PUC. Manitoba Hydro is in the process of securing a license for the Manitoba portion of the line, and Minnesota Power is awaiting DoE action on its application for a Presidential Permit. The US Department of Defense (DoD) and the US Department of State (DoS) have advised DoE that they have no objections to the issuance of a Presidential Permit for the project.

In its application with the PUC, Minnesota Power has mentioned that the Great Northern project is expected to cost between USD495.5 million and USD647.7 million, based on proposed routes and segment options.

In the recommendation, Minnesota Power has proposed two routes – a Blue Route and an Orange Route – each of which would begin at the US-Canada border crossing near Roseau, Minnesota and continue south to Grand Rapids, Minnesota, with a few variations in between.

The factors that favour the Blue Route are that the Orange Route would cross a larger portion of wildlife management areas and the Blue Route parallels existing corridors for a greater distance than the Orange Route.

MISO rejects three power transmission projects

The Midcontinent Independent System Operator Inc. (MISO) has rejected three power transmission projects, which as per the MISO-SPP Coordinated System Plan was expected to benefit power network of MISO and Southwest Power Pool Inc. (SPP).

The one project that received SPP board approval was the rebuild of an 11 mile (17.71 km), 138 kV line in northwestern Louisiana called South Shreveport to Wallace Lake, which would alleviate congestion on a nearby flowgate. The benefit-to-cost ratio for SPP was calculated at 11.86, according to SPP's assessment, and the SPP board approved the project in October 2015.

The second project was the addition of a new series reactor on the 115 kV Alto-Swartz line in north-central Louisiana, part of the Entergy Corporation system. It would relieve congestion on a nearby flowgate, with the bulk of benefits going to MISO. Engineering and construction costs were estimated at USD5.3 million.

The largest of the three interregional projects considered was a 78 mile (125.58 km), 345 kV line running north from the Elm Creek substation currently under construction near Concordia, to a new substation on an existing 345 kV line in Nebraska. It would be an extension of the Summit-Elm Creek 345 kV line in Kansas, due to be completed this year, being built in part by Westar Energy Inc., together with Mid-Kansas Electric Company LLC and ITC Holdings Corporation.

SCC Virginia schedules public meetings for Haymarket 230 kV line and substation project

The State Corporation Commission (SCC) of Virginia has scheduled public meetings on February 24 and March 14 in Haymarket, for the Haymarket 230 kV line and substation project proposed by Dominion Virginia Power.

The proposed project will support the rapid and continued commercial growth, particularly in the high-tech sector, in Haymarket and western Prince William County. This will also strengthen electric reliability for the local area by providing a new source of power in the heart of the growth area. Under the project, the developer has proposed to build a new substation west of Haymarket town and an approximately 5.1 mile (8.2 km), 230 kV line to connect existing transmission line facilities and the new substation. The company is scheduled to start construction works of the project in 2016 and finish it in 2018.

BLM seeks comments on EA of King to Wood River 138 kV transmission line rebuild project

The Bureau of Land Management (BLM) has announced the availability of the environment assessment (EA) report of the King to Wood River 138 kV transmission line rebuild project for public comments. The Bureau will seek comments till January 19, 2016. The North Valley project has been proposed by Idaho Power, from Hailey to Ketchum under its Wood River Electrical Plan 2007. Under this, the company has planned to construct a 12 mile (19.32 km), 138 kV power line between Wood River Transmission station and Ketchum substation to improve the reliability to the north end of the Valley. The new line would run in place of existing overhead distribution power lines along Buttercup Road and the highway. It will provide a backup when the existing power line fails due to weather or technical problems.

Idaho Power to rebuild aging transmission line in Wood River Valley

Idaho Power Company is planning to rebuild an aging transmission line that supplies electricity to Wood River Valley, which is one of two lines that serve the latter. The line, built in 1962, extends from Idaho Power's King substation, southwest of Gooding, to the Wood River substation north of Hailey. The 59-mile-long (94.99 km) line crosses 28.5 miles (45.86 km) of public land managed by the Bureau of Land Management (BLM). The developer has submitted its application for the renewal of right-of-way (RoW) across this land with BLM. According to Idaho Power, the USD34 million rebuild is necessary due to the age of the structures and the inadequate older conductor (wires). The line is facing outage issues. Idaho Power stated that installing new conductor at the same voltage will allow for higher capacity on the line and thereby will be able to meet the power needs of the valley in case the Midpoint-to-Wood-River line experiences an outage. The existing wooden H-frame structures are not strong enough to accommodate the new conductor, and will need to be replaced with weathering steel ones.

The BLM has released the environmental assessment (EA) for the project, which states that the project is likely to have little impact on the environment. The public comment period on the EA ends on January 19, 2016.

ITC Midwest purchases transmission assets of Interstate Power & Light

ITC Midwest LLC, a subsidiary of ITC Holdings Corporation, closed its purchase of certain transmission assets in Keokuk County, Iowa, from

Interstate Power & Light Company, according to a January 4 notice of consummation.

The deal, which was approved by Federal Energy Regulatory Commission (FERC) in early August 2015, was closed on December 30, 2015. The jurisdictional facilities include transmission assets in IPL's Hedrick substation that are used by ITC Midwest for transmission purposes. IPL, an Alliant Energy Corporation subsidiary, agreed to sell the assets for USD18,890.02.

Federal bankruptcy judge supports EFH's restructuring plan

Reportedly, a federal bankruptcy judge has agreed to approve the Energy Future Holdings (EFH) restructuring plan. The approval is subject to some conditions, including approval from Texas Public Utility Commission (PUC) for the sale of Oncor, subsidiary of EFH, to Hunt Consolidated, Inc.

In September 2015, Hunt Consolidated, Inc. and Oncor Electric jointly submit their application with Texas PUC for the sale of the EFH current ownership stake in Oncor, as part of EFH's ongoing bankruptcy proceedings, to Hunt Consolidation.

If approved, Hunt and its consortium of investors would acquire EFH's current stake in Oncor and restructure it into a Real Estate Investment Trust (REIT), and Hunt would assume full operational control of Oncor by mid-2016.

First, Hunt and its consortium of investors would acquire EFH's 80 per cent stake in Oncor and restructure it into an asset company, which would be a subsidiary of a REIT, currently known as Ovation Acquisition I, L.L.C. (Ovation). This asset company would continue to own the physical transmission and distribution assets currently owned by Oncor, including substations, transmission and distribution towers and poles, wire conductors, and other assorted components and equipment. The newly restructured asset company would be owned by the consortium of investors and managed by Hunt.

Second, a new operating company would be created and would keep the Oncor name, with its headquarters remaining in Oncor's existing office in Dallas, Texas. It would be responsible for the day-to-day operation, maintenance, and construction of Oncor's existing system. Oncor's existing management team, its employees, and operating assets would transfer to this operating company, which would be owned and controlled by the Hunt family through Shary Holdings, L.L.C., the same entity that owns Sharyland Utilities (the Hunt family's other regulated electric utility in Texas).

This is part of the bankruptcy solution offered by Hunt Consolidation to EFH in August 2015.

Alaskan utilities to set up joint electric transmission company

Alaskan utilities, working in conjunction with American Transmission Company (ATC), are likely to seek state regulators' approval in the third quarter of 2016 for a new joint electric transmission company.

Six Alaskan utilities filed a report with the Regulatory Commission of Alaska (RCA) on September 30 on their voluntary efforts to develop a business model for a transco for the area of the state known as the Railbelt. ATC is also working with the utilities on their effort. A status report had been expected by the end of the year, and was filed with the regulatory agency on December 22.

The report noted that since 1998, the state has sponsored eight studies of the Railbelt region's electric system. Utilities serving the area currently share limited interconnections, and according to them, opportunity may exist to reduce congestion and improve reliability in an economical manner.

According to a timeline in the report, the design of a business model for the transco, called the Alaska Railbelt Transco, (ART), should be finished in the second or third quarter of 2016. Individual decisions about participation should be made in that same timeframe. Those decisions are necessary before the utilities can apply to the RCA for a certificate of public convenience and necessity to establish the transco. The new entity is projected to be operational in the second quarter of 2017.

Participating utilities are: Anchorage Municipal Light & Power; Chugach Electric Association Inc.; Golden Valley Electric Association Inc.; Homer Electric Association Inc.; Matanuska Electric Association Inc. and the city of Seward Electric System. Each will decide on its own whether to participate in the transco.

By net system investment, Chugach is by far the largest of the six participants, with 41.9 per cent of the utilities' investment. By peak demand, however, Chugach and Golden Valley have about the same shares, 25.4 per cent and 25.7 per cent respectively, with the Anchorage utility with 22.2 per cent share.

By energy usage, Golden Valley is the largest of the six, at 26.5 per cent share.

LATIN AMERICA

Brazilian Ibama approves HVDC line corresponding to Belo Monte HPP project

The Brazilian environment regulator Ibama has approved an installation licence for one of the transmission lines of the Belo Monte Hydro project.

The 11.2 GW Belo Monte power complex will be located on Xingu River in the northern state of Pará. To evacuate power from the HPP, a 2,140-km long, ±800 kV high voltage direct current (HVDC) line from the Xingu substation to the Estreito substation in Minas Gerais state is being planned. The project also includes the construction of the 500 kV/±800 kV Xingu and Estreito substations. The line is likely to start operating by early 2018.

The project was awarded in June 2014 to the IE Belo Monte consortium comprising Furnas Central Electric SA (Furnas) (24.5 per cent), Centrais Elétricas do Norte do Brasil S.A (Eletronorte) (24.5 per cent) and State Grid Corporation of Chine (SGCC) (51 per cent). The consortium offered a bid of BRL434.65 million, representing a discount of about 38 per cent. ANEEL set the Receita Anual Permitida (RAP) or annual permitted revenue limit for the project at BRL701 million for the project.

(BRL1=USD0.25)

Environmental permitting process to begin in 2016 for Peru-Ecuador interconnection

The environmental permitting process is scheduled to begin this year for a planned 500 kV link between Ecuador and Peru under the umbrella of the Andean interconnection initiative SINEA Interconnection Project.

The work is for the Ecuadorian side of the project, which will connect the Chorrillos and Pasaje substations (271 km) and run from Pasaje to the border with Peru (71 km). The Peruvian component would run for 329 km.

The Inter-American Development Bank (IDB) will provide funds for the consultancy contract under Ecuador's national transmission system reinforcement programme. The winner will also conduct a social participation process to inform the public that may be affected and gather their opinions.

Ecuadoran authorities recently signed a contract with Leme Engenharia to complete the final project studies.

Peruvian grid operator COES's 2015-24 transmission plan highlights complementary hydrological advantages of the 500 kV interconnection because of construction of large-scale hydroelectric plants in Ecuador and the existence of important hydro projects in Peru.

Mexican CFE to be restructured

According to the energy ministry Sener, Mexico's state utility CFE will create transmission, distribution, supply and generation subsidiaries, each of which will be managed separately.

The restructuring of the utility is stipulated by the electricity industry law, implemented as part of Mexico's energy reform, allowing the CFE to participate in the country's newly created wholesale power market.

In addition to the subsidiaries listed above, the CFE will be allowed to create more subsidiaries as it deems necessary, to boost its potential in the new market competition, and the new firms will include at least four generation subsidiaries.

The separation of the various subsidiaries will ensure that all of the CFE's generation and supply firms will have open access to the national transmission and distribution grid, which is key to eliminating barriers to the construction of new power stations and attracting investment to the sector.

ASIA PACIFIC

India's KEC International bags INR10 billion contracts

India-based engineering, procurement and construction (EPC) company KEC International Limited has won orders worth INR10.01 billion in its transmission and distribution (T&D), cables, and renewables (solar) businesses.

In the T&D segment, the company has secured an order worth INR6.6 billion for construction of various transmission lines and substations in Saudi Arabia, a INR0.45 billion order for construction of

transmission line in Oman, orders worth INR0.54 billion in India, Afghanistan and Zambia; and INR0.60 billion contracts in India, Afghanistan and Zambia.

In addition the company has also secured an INR1.6 billion order for the supply of power and telecom cables, while in the renewables segment it secured an INR0.19 billion order for setting up of a grid-interactive solar photovoltaic power plant in Andhra Pradesh.

(INR1=USD0.015)

Sterlite commissions 400 kV RAPP project in India

India's private transmission company Sterlite Grid Limited (SGL), a wholly-owned subsidiary of Sterlite Technologies Limited (STL), has commissioned the Transmission System Associated with Rajasthan Atomic Power Project (RAPP-Units 7, 8) on January 2, 2015, ahead of schedule. At the same time the completion of project before the scheduled time makes it the first project eligible for the incentive programme [(won as part of Tariff Based Competitive Bidding (TBCB)] introduced by Union Ministry of Power.

The project was implemented by RAPP Transmission Company, a special purpose vehicle (SPV) set up for the project. The scope of the project involved the development of an approximately 200 km long, 400 kV double-circuit line to transfer power from the RAPP located near Kota in Rajasthan to Shujalpur in Madhya Pradesh.

The line will also act as an inter-regional link to strengthen transmission systems to exchange power between the northern and western grids.

India's Powergrid completes 400 kV transmission project

Vizag Transmission Limited (VTL), a special purpose vehicle (SPV) owned by India's central transmission utility Power Grid Corporation of India Limited (Powergrid), has commissioned the 400 kV Khammam–Nagarjunasagar transmission line project on December 31, 2015.

The project is one of the components of the larger project System Strengthening in Southern Region for Import of Power from the Eastern Region.

The project involves the development of the 765 kV Srikakulam pooling station–Vemagiri II pooling station double-circuit line (about 600 circuit km); and the 400 kV Khammam (new)– Nagarjunasagar double-circuit line 2 (300 circuit km). It involves setting up an additional high voltage inter-regional alternating current (AC) link between the southern and eastern regions to facilitate the import of power to the former.

BHEL commissions 220 kV substations in Afghanistan

India's integrated power plant equipment manufacturer has commissioned two 220/20 kV substations in Afghanistan on engineering, procurement and commissioning (EPC) basis.

The substations have been commissioned at Charikar, around 60 km from Kabul and Doshi, and around 150 km from Kabul.

Both the substations are part of the 220 kV Phul e Khumri–Kabul transmission system and will provide power to Charikar and Doshi sites and their neighbouring areas.

India's 765 kV Warangal power project to be awarded in February 2016

The subsidiary of state-owned Power Finance Corporation Limited (PFC)–PFC Consulting Limited (PFCCL) is likely to auction the Additional inter-Regional Alternating Current Link for Import into Southern Region, i.e. Warora–Warangal and Chilakaluripeta–Hyderabad–Kurnool 765 kV Link project, in February 2016.

The financial bids for the project will be opened on February 5, 2016. Based on the lowest annual tariff, the name of the successful bidder will be announced on February 12, 2016.

PFCCL is one of the two bid process coordinators appointed by the Ministry of Power (MoP) for awarding interstate transmission projects through the tariff-based competitive bid (TBCB) process.

The project entails the construction of the 765/400 kV, 2x1,500 MVA Warangal substation, the 765 kV double-circuit Warora Pool–Warangal (New) line, the 765 kV double-circuit Warangal (New)–Hyderabad line, the 400 kV double-circuit Warangal (New)–Warangal (existing) line, the 765 kV double-circuit Hyderabad–Kurnool line, the 765 kV double-circuit Warangal (New)–Chilakaluripeta line and the 400 kV (quad) double-circuit Cuddapah–Hoodi line.

In line with the above, PFCCL also established a special purpose vehicle (SPV), Warora-Kurnool Transmission Limited, which will be transferred to the selected developer for the implementation of the project.

Bangladesh's PGCB invites bids for high voltage substations and transmission lines

Bangladesh's state-owned transmission system developer Power Grid Company of Bangladesh (PGCB) has invited bids for the construction of high voltage substations and transmission lines under the Islamic Development Bank (ISDB)-funded Power Grid Expansion Project.

The scope of the contract involves the design, supply, erection, testing and commissioning of the 400 kV, 230 kV and 132 kV substations (16) under Lot I. Under Lot II it involves the design, supply, erection, testing and commissioning of the 400 kV, 230 kV and 132 kV transmission lines (15).

The bid due date for the contract is March 15, 2016.

Vietnam's NPPMB commissions 500/220 kV line project

Northern Vietnam Power Project Management Board (NPPMB), subsidiary of state-owned Electricity of Vietnam (EVN) Group, has commissioned the 500/220 kV Bac Ninh 2 Pho Noi Transmission Lines project on January 4, 2016.

The project involved the development of a 30.2 km long, 500/220 kV Bac Ninh 2–Pho Noi line to the 220 kV Bac Ninh 2 substation and associated 500 kV grid in the northern region.

National Power Transmission Corporation funded the project work under the Electricity of Vietnam (EVN NPT) programme, with an estimated amount of over VND1,164 billion.

(VND1= USD0.00004)

Power utilities in Vietnam invite high voltage bids

Three high voltage bids for the construction of transmission line and supply of steel towers, and conductors and cables were invited by power utilities in Vietnam.

Northern Power Corporation invited two bids. The first was for the for the supply and transportation of conductors, optical cables and accessories for the 110 kV Phong Tho–Than Uyen Transmission Line, while the second bid was for the supply and transportation of steel towers for the 110 kV Phong Tho–Than Uyen Transmission Line. Both bids are under the World Bank-funded Distribution Efficiency Project and their due date is February 19, 2016.

The third bid was invited by Southern Vietnam Power Project Management Board (SPPMB) for the construction of 220 kV Phu Lam–Cai Lay 2 transmission lines (including supply of steel towers, testing and commissioning) under the World Bank-funded Transmission Efficiency Project (TEP), in two lots. Lot I involves construction of transmission lines from Long An substation to position G14 and extension of bay at Long An substation, while Lot II involves the construction of transmission lines from position G14 to Cai Lay 2 substation. The last date for bid submission is February 23, 2016.

EUROPE

Tauron Distribution SA awards contract for overhead line to Energoprojekt Poznań

Poland's Tauron Distribution SA has awarded a contract to Energoprojekt Poznań for the reconstruction of single-track 110 kV overhead line between GPZ Double and GPZ Namysłów.

The scope of work includes architectural and integrated engineering services, urban planning and landscape architecture-related scientific and technical consulting, service testing, and analysis services. The contract is a government procurement agreement and its final value is PLN1.1 million.

(PLN1=USD0.25)

Germany provides EUR29 million to boost Mozambique power supply

The German government will provide a total of EUR29 million to support projects aimed at improving the supply of electricity in Mozambique.

Of this amount, EUR20 million will be allocated to the power transmission line between Mozambique and Malawi, with the remaining EUR9 million for the company's Short-term Investment Plan (STIP).

(EUR1=USD1.09)

Spain's Abengoa seeks to sell stalled Brazil projects

Spain's multinational Abengoa SA is seeking buyers to revive transmission lines and other construction projects in Brazil that the company had suspended after filing for creditor protection in Spanish courts. The company is looking for a market solution for projects it has been contracted to build and operate in Brazil. Brazil's government is also in talks with several foreign companies interested in taking over construction work of new power transmission lines left incomplete by Abengoa.

The work stoppages are expected to delay the completion of 1,700 kilometres of transmission lines needed to link the new Belo Monte hydroelectric project in Brazil's Amazon with key parts of the national power grid. The Belo Monte hydro complex is expected to start generating power in March 2016. Between April and December 2016, five additional turbines with 611.1 MW of capacity each are scheduled to begin operating, but not all of the capacity is likely to be delivered to the grid right away because of delays in transmission line construction.

Scottish Beauly-Denny line commissioned

Scotland's 400 kV Beauly-Denny line has been successfully commissioned. Scottish Hydro Electric Transmission (SHE Transmission) and SP Energy Networks have jointly developed the 220 km long line.

615 steel towers, replacing over 800 pre-existing 132 kilovolt towers, support the new line. The line provides a fully functioning power super-highway between the Highlands and the Central Belt. It is unlocking Scotland's renewable resources and supporting economic growth in the Highlands. The project involved replacement of the existing 132 kV single-circuit overhead line connecting Beauly near Inverness and Wharry Burn near Stirling, with a 220 km long, 400 kV double-circuit line from Beauly to Denny through Wharry Burn.

SHE Transmission commissions new substation to connect green energy

Scottish Hydro Electric Transmission (SHE Transmission) has constructed a 132/33 kV substation at Crarae near Minard, with an investment of EUR7.5 million. This will now connect 43 MW of renewable power to the main grid. The project took just 15 months to complete and reinforces the network in the Argyll and Bute area.

(EUR1=USD1.09)

Norway's competition authority backs Statnett's power line monopoly

The Competition Authority of Norway has declared that Statnett, the national electricity transmission network operator, should retain a monopoly on building and operating international electricity lines. Statnett is already involved in two power interconnection projects to Germany and the United Kingdom.

In 2013, the former government granted exclusive rights to Statnett, suspending NorthConnect, a project by Vattenfall and private Norwegian companies, to build a power interconnection to the United Kingdom. The new government proposed to change the law in 2015 to allow Nordic power producers to export surplus power. The Norwegian parliament will have the final say on the amendments proposed by the Ministry of Oil and Energy and a decision is expected by mid-March 2016.

Eltel wins substation contract from E.ON

Eltel Networks Energetyka SA has won a contract for a full rebuild of two substations – Söderåsen and Mörarp – belonging to E.ON Elnät Sverige AB. The value of this contract is approximately EUR13 million.

The substation contract is a turnkey project for Eltel comprising design, supply of all equipment, civil works, installation, and commissioning as well as decommissioning of the existing substations.

The contract includes rebuilding of the 130 kV substations as well as a step-by-step energisation scheme where existing parts of the substations are phased out and new parts are phased in. This step-by-step energisation scheme is critical in order to maintain and guarantee uninterrupted operation of the vital substations.

(EUR1=USD1.07)

Romania's Transelectrica awards contract for power systems to Institute for Studies and Power Engineering SA

Romanian transmission system developer and operator Transelectrica has awarded the contract

for designing power systems of 400 kV lines connecting *Constanța* to Medgidia.

The scope of work includes architectural services, engineering services, urban planning and landscape engineering, technical testing, and analysis services. The total value of the contract is RON0.95 million. The contract is a government procurement agreement.

(RON1=USD0.24)

Slovak TSO SEPS to invest EUR87 million in electricity grid in 2016

Slovakian transmission system operator Slovenska Elektrizacna Prenosova Sustava (SEPS) is planning to invest nearly EUR87 million to extend its 400 kV and 200 kV transmission networks in 2016.

The largest volume of funds will be invested in the continuation of the 400 kV grid construction between the Gabcikovo hydro power plant and Velky Dur. Also, innovation of electricity control centres in Zilina and Bratislava as well as construction of several electricity substations in the country will be undertaken.

A major portion of the funds will come from the International Fund for Support of Decommissioning of the V1 Bohunice Nuclear Power Plant (NPP).

Estonian government makes amendments to electricity transmission grids regulations

Estonian government has passed amendments to electricity transmission grids regulations to optimise EUR1.5 million expenditures on installation of smart electricity meters.

A smart electricity meter would not be installed at electricity consumption points, which have not consumed electricity in three years.

The amended regulation would also extend the operating terms of the old power blocs of Eesti Energia Narva power plants through 2023.

(EUR1=USD1.09)

Croatia's TSO awards contract for 110 kV line to Končar Power Plant and Transportation Inc.

Croatian transmission system operator (TSO) Hrvatski operator prijenosnog sustava d.o.o. (HOPS) has awarded a contract to Končar Power Plant and Transportation Inc for reconstruction of 110 kV line in Kutina, Croatia.

The scope of work includes supply of equipment, execution of works and provision of services. The total value of the contract is HRK97.44 million.

(HRK1=USD0.14)

Croatian HOPS invites bids for reconstruction of 110/35 kV substation

Croatia's Hrvatski Operator Prijenosnog Sustava d.o.o. (HOPS) has invited bids for the execution of reconstruction works of the 110/35 kV Pokuplje substation, along with the supply of equipment. The last date for submission of bids is February 10, 2016.

Macedonia's MEPSO calls for EUR49 million tender for power link with Albania

Macedonian transmission system operator AD (MEPSO) has invited tenders for upto EUR49 million for the construction of the Macedonian section of a planned 400 kV cross-border electricity interconnection from Bitola of Macedonia to Elbasan of Albania.

The project is financed with a loan provided by the European Bank of Reconstruction and Development, and grants provided by the Western Balkans Investment Framework and Luxembourg.

The Macedonia–Albania Transmission Project is part of the European Commission's initiative to establish an East-West electricity transmission corridor between Bulgaria, Macedonia, Albania, Montenegro and Italy, including the planned submarine cable from Montenegro to Italy, which are important steps towards establishing a regional electricity market.

The last date for submission of bids is January 6, 2017. Tendering for the consultancy contract is expected to begin in the first quarter of 2016.

(EUR1=USD1.09)

Ukrenergo to commission Kakhovska substation and 750 kV power line in 2016

The Ukrainian state-run national energy company Ukrenergo has plans to finish construction and commission the Kakhovska substation and the 750 kV transmission line from the Zaporizhia nuclear power plant (NPP) to the substation Kakhovska in 2016. The work at the Kakhovska substation has been completed 60-70 per cent. The 750 kV

transmission line is predicted to be commissioned in September 2016.

In August 2013, Ukrenergo signed a contract with Spain's Instalaciones Inabensa SA for this transmission line. This project is of great economic and strategic importance for Ukraine. The new line will improve the power supply to Kherson and Odesa regions and will release the locked capacity of Zaporizhia NPP.

Government of Belarus invites bids for reconstruction of 220 kV line

Government of Belarus has invited bids for the reconstruction of 220 kV line from Miradino to Mogilev. The scope of work involves design and survey works.

The last date for submission of bids is January 15, 2016. The total value of the contract is BYR992.8 million.

(BYR1=USD0.000053)

Investment programme of FGC UES to total RUB471 billion in 2016-2020

Russia's transmission system operator Federal Grid Company of Unified Energy System (FGC UES) has received approval from the Ministry of Energy for its investment programme for 2016-20.

The company envisages an investment of RUB471.12 billion in 2016-2020. FGC plans to complete 44,338 MVA of transformer capacity and 11,781 km of transmission lines over this period.

(RUB1=USD0.014)

Russia's OJSC ESSK UES invites bids for 500 kV substation

Russia's OJSC ESSK UES has invited bids for the modernisation and reconstruction of the 500 kV Pakhra substation under the European Bank for Reconstruction and Development (EBRD)-funded Pakhra Substation Modernization Program.

The duration of the contract is 45 months from the date of award. The last date for submission of bids is February 25, 2016.

MIDDLE EAST/AFRICA

Saudi's SEC signs USD1.4 billion loan agreement with international banks

Saudi Arabia's state-owned power utility Saudi Electricity Company (SEC) has successfully signed a loan agreement worth USD1.4 billion with seven international banks, on January 6, 2016. The facility has a lifespan of three years and was provided by Bank of Tokyo-Mitsubishi UFJ, Mizuho Bank Limited, Sumitomo Mitsui Banking Corporation, HSBC, JP Morgan, Credit Agricole and Deutsche Bank. This is in addition to the successful closing of the SAR denominated tranche with local banks National Commercial Bank and Samba Financial Group on December 16, 2015, which amounted to USD666 million with a tenure of three years. Both the agreements bring the company's revolving facilities to a value of USD2.06 billion. In August 2015, SEC revealed its plans for raising revolving credit facilities (RCF) spilt into a Saudi Riyal tranche and a US Dollar tranche in order to support its capital expenditure programme. The RCF will act as a bridge between the proceeds of any long-term finance and the ongoing investment requirements. This will provide SEC with a proper and harmonious financing mix to support its capital expenditure and achieve the optimum utilisation of cash resources, and reduce liquidity and financing costs.

Eskom invites construction bids for 765 kV and 400 kV lines

South Africa's Eskom Holdings SOC Limited (Eskom) invites bids for the construction of the 765 kV and 400 kV Masa–Ngwedi (Section D and E) transmission lines under the World Bank-funded Eskom Investment Support Project. The scope of contract involves providing access to roads and infrastructure; bush clearing; supply of tower foundations and stay wire foundations; fabrication and erection of structural steel transmission towers; installation of hardware, conductors and insulators; tower assembly, stringing and labeling; conductor regulation; and supply of a fall arrest system (FAS). The bid due date for submission of bids is February 12, 2016.◆