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Energy News Monitor

RENEWABLE CAPACITY ADDITION SUSTAINS MOMENTUM

Monthly Non-Fossil Fuels News Commentary: June - July 2019

India

India plans to add 500 GW of renewable energy to its electricity grid by 2030 in a bid to clean up air in its cities and lessen the rapidly growing economy's dependence on coal, the government said. Rooftop solar power in India grew at a record 1,836 MW in the last fiscal. At the end of FY19, the overall installed rooftop solar capacity stood at 4,375 MW, soaring 72 percent over FY18, a report by Bridge to India showed. The fresh capacity addition came from commercial, industrial, public sector and residential projects. With a nameplate capacity of 2,140 MW, the industrial segment is the biggest contributor to the solar rooftop power portfolio. Maharashtra (618 MW), Rajasthan (393 MW), Tamil Nadu (365 MW), Gujarat (314 MW) and Karnataka (298 MW) are the top five states leading in the pecking order of solar rooftop power generation. The solar rooftop market is split between inverter suppliers and EPC contractors, each with a size of 1,836 MW. Project developers make up the remaining 688 MW. Rooftop solar power continues to grow consistently and is gaining increasing share of the market. The government, in 2015, had set a huge renewable energy capacity target of 175 GW by 2022 for transitioning to a low-carbon pathway. Of this, 100 GW was earmarked for solar capacity, with 40 GW (or 40 percent) expected to be achieved through decentralised and rooftop-scale solar projects.

The IEEFA, in a report, noted that from a historically low base, rooftop solar has been the fastest growing renewable energy sub-sector in India, with a CAGR of 116 percent between 2012 and 2018. Some 70 percent of the market growth has been driven by C&I consumers, clearly incentivised by the very high tariffs applying to these two sectors. The remaining 30 percent is split equally between government and residential consumers. The increased adoption of rooftop solar in Indian states can be attributed to high retail tariffs for C&I consumers, favourable net metering policies, corporate social responsibility programmes and increased consumer awareness. IEEFA estimates that for the next three years, rooftop solar installations will grow at a CAGR of 50 percent, suggesting a cumulative 13 GW of installed capacity by FY2021-22.

India saw expand in solar PV employment in 2018, while China, the US Japan and the EU lost jobs, IRENA said. In total, 11 mn people were employed in renewable energy worldwide in 2018, up from 10.3 mn in 2017. Accounting for one-third of the total renewable energy workflow, solar PV retains the top spot in 2018, ahead of liquid biofuels, hydropower and wind power. Besides India, PV employment expanded in Southeast Asia and Brazil, while China, the US, Japan and the European Union lost jobs.

Tariffs rose marginally from February in an auction by SECI for 1200 MW of projects. SECI is the renewable energy ministry's nodal agency responsible for conducting wind and solar auctions. Ayana Power, Renew Power, Azure Power and Mahindra Susten quoted a tariff of ₹2.54 for 300 MW, 300 MW, 300 MW and 250 MW respectively. Avaada Energy won 50 MW at ₹2.55 per kWh. The tariff ceiling was set at ₹2.65 per kWh. The tender was oversubscribed by almost 1000 MW. India imposed a 25 percent staggering safeguard duty on the import of solar panels and modules, mainly from China and Malaysia, from end-July for a year, followed by 20 percent for the next six months and 15 percent for another six. Besides, interest rates have hardened, pushing the tariff upwards. The ministry's Approved List of Models and Manufacturers is expected to come into force in a year which means that only those approved modules can be installed. The projects can be located anywhere in India, and linked to the interstate transmission system.

The government is expected to launch a scheme to bring in global firms for setting up mega manufacturing plants in India for solar cells, batteries and solar charging infrastructure through auction and provide tax benefits on these investments. Inadequate domestic solar equipment manufacturing capacity has been an issue for the past many years especially in view of India's ambitious renewable energy target of having 175 GW by 2022. According to Industry estimates, solar cell and module manufacturing capacity in the country is about 12 GW. The project developers depend heavily on imports of equipment for setting up solar power capacities in India. According to the Economic Survey tabled in Parliament, India has the potential for $30 bn annual investment in renewables in next decade and even beyond that in view of the target of having 175 GW of clean energy by 2022. In the budget, the government has proposed ₹123.53 bn investment by Indian Renewable Energy Development Agency and SECI for this fiscal, up from ₹108.35 bn in 2018-19. This should be put in the context of the fact that more than a year and 10 extensions later, the manufacturing linked solar tender has not received expected response. Hoping to attract more investor interest, the tariff cap has been set at ₹2.75 per kWh. The SECI issued a RfS notice for selecting solar power developers. This will be for setting up 6 GW (per annum) of solar power plants linked to 2 GW of solar manufacturing plant. A bidder can quote any capacity up to 1.5 GW of solar power projects linked to 0.5 GW of solar manufacturing capacity, corresponding to one project. A total of four such projects have been put up for bidding. A company can bid for one or all four. In an interesting amendment introduced in the new RfS, SECI has allowed using imported solar modules at the power plant and not necessarily the ones manufactured at the linked unit set up by the company. Earlier, this was mandatory. The tender, however, has not included the long-awaited demand of the industry to include the existing solar manufacturing units. The single bid came from Azure Power in tie-up with Waaree Energies. The government re-issued the tender in March and it was also extended again. The latest global tender closes in August 2019.

The Budget's muted focus on green energy and tepid hike in allocation for the MNRE has cast doubts on the government's target to achieve 225 GW of renewable energy installs by 2022. The Budget has marginally raised the allocation for MNRE to ₹52.55 bn from last year's ₹51.47 bn. Though the Budget has a thrust on renewable energy, it is not complemented by enhancing the outlays for the sector. The Budget has an outlay of ₹9.2 bn for wind power, ₹30 bn for solar power (both grid and off grid) and ₹5 bn for the green energy corridor that aims to synchronise electricity produced from renewable sources with conventional power stations in the grid. The government is expected to use the approach of Mission LED bulb to promote the use of solar stoves and battery chargers in the country.

Total, one of the world's major integrated oil & gas companies, along with French energy group EDF Renewables, will develop 700 MW of solar power projects in India through their joint subsidiary EDEN Renewables India. Total Eren and EDF Renewables announced signing of four 25-year long-term power purchase agreements, for four solar power projects totalling 716 MWp of installed capacities in northern India. These projects have been awarded to EDEN Renewables India, their solar photovoltaic equally owned joint venture in India, it said. With a planned production of nearly 1,200 GWh per year, these solar PV projects will generate energy equivalent to consumption of 1.1 mn

Indian households. The construction is due to start by the end of this year and commissioning is expected towards the end of 2020. EDEN Renewables India has been building and operating solar projects jointly owned by the two partners in India since 2016. It currently has 207 MW of projects in Rajasthan, Uttrakhand and Madhya Pradesh.

The solar equipment makers have to deal with a higher GST rate for the components and lower rates for the end product. The Pune-based Solar Thermal Federation of India demands the 5 percent rate on solar-related products are equally implemented. Much of the equipment is imported and a higher tax on these impacts the product's end price.

The central government will launch a solar scheme for farmers that will ensure a minimum annual income of ₹100,000. The farmers who don't have the capital can lease the land to developers to set up the solar panels. If given to the developers, the farmer will get at least ₹0.30-0.35 per kWh to ensure an annual income of ₹100,000. The scheme is part of the government's target to double the income of farmers by 2022.

American investor GIP is in talks to buy the Indian solar power business of French energy firm Engie SA in a deal potentially worth around $500 mn. GIP is interested in Engie Solar, which has an 1,100 MW solar portfolio in India. Of this, 740 MW is operational. Rothschild and Co. has been mandated to find a buyer for the assets. Private equity fund Actis Llp and Edelweiss Infrastructure Yield Plus Fund were in talks to buy the French firm's Indian solar power business. Sovereign wealth funds GIC Holdings Pte Ltd and Abu Dhabi Investment Authority agreed to invest $495 mn in Greenko Energy Holdings, in one of the largest funding rounds by an Indian clean energy producer. GIP has been present in the Indian clean energy space and led a group of investors to acquire Equis Energy for $5 bn in October 2017. The sale included liabilities of $1.3 bn and the Indian portfolio of the Singapore-based renewable energy developer, comprising green energy platforms Energon and Energon Soleq. India has an installed renewable energy capacity of 74.79 GW, of which solar and wind power account for 25.21 GW and 35.14 GW, respectively.

BHEL the country's largest power equipment manufacturer, announced it has bagged two orders worth ₹8 bn for setting up solar power plants of 200 MW capacity for NTPC Ltd and GSECL. BHEL is currently offering EPC solutions for both off-grid and grid-interactive solar PV plants at multiple locations in India. It has a current portfolio of over 1 GW of solar PV plants including 500 MW capacity that is already commissioned. The company said it has enhanced its manufacturing capacity for solar cells and solar modules and is currently manufacturing space-grade solar panels and batteries at its Electronics Systems Division in Bengaluru.

The MNRE has decided to set up a three-member dispute resolution committee to look into disputes beyond contractual agreements between solar or wind power developers and SECI or state-run power giant NTPC. This mechanism will cover all those projects that would be implemented through or by SECI and NTPC.

This is important in the context of the decision of the government in Andhra Pradesh to issue recovery notices to all wind and solar power generating companies for what it terms as the loss they caused to distribution companies. In an order, the government also directed its electricity distributors to cancel short-term power purchase agreements with Lanco Infratech and Spectrum group. Gas allotted to the two projects will be reallocated to GMR Energy's Vemagiri plant. It also cancelled allotment of 5,000 acres to Greenko's wind solar hybrid project in Anantapur. The state's power distribution companies are in poor financial health and renewable energy projects signed at rates higher than in other states by the previous government is blamed. Andhra Pradesh is one of the leading states in the use of renewable energy, with about 8,364 MW of solar and wind projects — 6,614 MW of these are commissioned and the rest are under construction.

The ongoing attempts by the Andhra Pradesh government to renegotiate existing wind and solar PPAs without mutual consent may adversely impact investor sentiment and future investments in the sector, ratings agency ICRA said. The state government has constituted a High-Level Negotiation Committee to review, negotiate and bring down the cost of wind and solar PPAs tied-up by the state discoms. The committee is to be guided by the lowest wind and solar power rates in the corresponding years, prevailing rates and opportunity cost of power purchase for the discoms.

The Telangana government is planning to come out with a new solar policy factoring in the changes in the rapidly expanding renewable energy sector. The policy framework will take forward the State government agenda and align with the Centre's larger target of achieving 175 GW capacity by 2022. The State plans to come out with fresh solar tenders for capacity addition including for a couple of large floating projects in the two major reservoirs of the State.

The Maharashtra Electricity Regulatory Commission is likely to hold a public hearing for gross metering of solar rooftop consumers soon, MSEDCL said. At present, net metering is done for solar rooftop consumers. The net meter measures the quantum of solar energy generated by the consumer's panels and the power consumed by him. MSEDCL bills the consumer for the difference between consumption and generation. If generation is more, then the consumer is paid the amount at the end of financial year. If consumption for a month is 500 kWh and generation 450 kWh. MSEDCL will bill for 50 kWh. If generation is 550 kWh, the consumer is paid for 50 kWh at the average power purchase rate of MSEDCL for that year. If gross metering method is adopted, the consumer bill is calculated for 500 kWh and paid for 450 kWh at a rate decided by the MSEDCL. The consumer bill increases because under slab wise tariff the consumer will pay for 500 kWh at a very high average rate. Even if the consumer generates more, the consumer would be required to pay MSEDCL because the bill will be high. MSEDCL had earlier tried to introduce gross metering through its tariff petition for 2018-19. The commission had then rejected the plea asking the distribution company to file a separate petition. Now, the regulator wants to hold a public hearing for the same.

Uttarakhand has started an effort to produce electricity from pine needles, locally known as pirul, to reduce the spread of pine needles that supposedly cause forest fires. It has issued Letters of Award to 21 companies for this purpose, under a policy announced last year. These companies would produce a total of 675 kW. So far, 12 agreements have been signed between these companies and the government. Uttarakhand Power Corp, the state power distribution company, would sign separate power purchase agreements with these companies, to buy electricity at ₹7.54 per kWh.

The Delhi Police will set up rooftop solar energy systems in over 200 of its buildings across the city. A pact in this regard was signed between SECI and the Delhi police. Under this, SECI the government's nodal agency for implementation of the National Solar Mission, will support the implementation of grid-connected rooftop solar PV systems on the establishments of Delhi Police. With this project, it is estimated that Rooftop Solar Systems of total capacity of about 3-4 MW will be implemented across various Delhi Police buildings.

Gujarat government, which allocated ₹10 bn for a new rooftop solar power generation scheme, also announced plans to increase power generation capacity from renewable sources to 30,000 MW in the next three years. This number is more than three times the current renewable energy capacity. The state also plans to sell a third of this power to other states in 2022. In 2013, renewable energy capacity in Gujarat was 4,126 MW, which has risen to 8,885 MW, Finance Minister Nitin Patel said, while presenting a modified budget for 2019-20. The rooftop solar generation scheme that aims to cover 200,000 families. Scheme beneficiaries will get a 40 percent subsidy on the costs of generations systems of up to 3 kW and a 20 percent subsidy for systems with capacities between 3 kW and 10 kW. Gujarat has an installed capacity of 6,000 MW at wind farms, according to the Socio-Economic Review 2018-19.

The Airports Authority of India inaugurated a 1 MWp solar plant at Tirupati's Renigunta International airport in Andhra Pradesh. With this, Tirupati has joined the league of solar-powered airports in south India, along with Cochin, Trivandrum and Vijayawada, said distributed solar developer Fourth Partner Energy, who commissioned it. Tirupati's ground-mounted solar plant has been installed across four acres of land, parallel to the airport runway and its isolation bay. Excess power generated at Tirupati airport will then be routed back to the national grid via net metering, in line with Andhra Pradesh's renewable energy policy, the Hyderabad-based solar company said.

The Chandigarh administration has once again extended the deadline for three months for the installation of solar plants. This is the third extension given by the UT administration. The administration, in a notification issued on 18 May 2016, had made installation of rooftop solar power plants mandatory in residential houses measuring 500 square yards and above and group housing societies. There are around 10,000 such houses in different parts of the city, including sectors 8 (417 houses), 11 (493 houses), 33 (643 houses), 35 (419 houses) and 36 (417 houses). Till date, only 29 percent of houses have installed solar plants.

UP plans to commission 1500 MW solar capacity power plants by next year. The Centre has set a target of installing 175 GW of renewable energy capacity by 2022, which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power. UP government has set a target of producing 10,700 MW renewable energy by 2022. Besides, a 32 MW solar project is coming up at Jalaun in the state. To boost the use and generation of green energy, the state government has launched UP Solar Energy Policy 2017. The policy aims to encourage participation of private sector and provide investment opportunities to set up solar power projects in the state. It also aims to support in providing environment friendly and affordable power for all.

Maharashtra is all set to get floating solar power generation plants in four dams. The estimated investment per megawatt is ₹44.5 mn, with a total installed capacity of 500 MW. The work to set up the plants is under progress as permitted under the Maharashtra Infrastructure Development Enabling Authority Act.

Vedanta said its first pilot floating solar plant will be completed in the next two to three months. Vikram Solar, module manufacturer and rooftop solar and EPC solutions provider, had earlier in the year announced that it bagged the project order for a 1 MW floating solar plant for Hindustan Zinc Ltd, a Vedanta Group firm. The plant will be located at Ghosunda Dam, near Chittorgarh, Rajasthan, it said. The solar plant is expected to have an energy yield of 1,993 MWh a year and will be able to power 1,400 houses a year.

Wind turbine maker Inox Wind said it has commissioned the common power evacuation facilities at Dayapar site in Bhuj in Gujarat. Inox Wind said this will enable commissioning of projects won under various SECI auctions. SECI is a nodal agency of the central government for auctioning renewable energy projects in the country. The company said, at present, it has more than 1,400 MW of developed and under development projects in Gujarat and more than 2.6 GW installations all over India.

KKNPP has said that the proposed AFR Spent Fuel Storage facility to be established at the plant is completely safe and not alarming as projected by those opposing it. A public hearing to establish the storage facility is to be held on 10 July. It stated that KKNPP in Tirunelveli's Radhapuram taluk was the seventh nuclear power generating site of the Nuclear Power Corp of India Ltd in India, with a total capacity of 2000 MW. All the operating nuclear power stations in India and abroad had facilities to store new as well as spent (used) fuel. The scheme to store spent fuel in a nuclear power plant was two-fold. Two AFRs, at Tarapur near Mumbai and Rawatbhata in Rajasthan, were in operation in India and one more was being constructed at Rawatbhata. AFR design was specific to fuel type. The proposed facility was designed for storing spent fuel discharged from reactors at Kudankulam 1 and 2 and not from any other reactor.

Dal Khalsa has strongly opposeed union government's proposal to set up atomic power plants in Punjab and has urged all the political parties of the state including the ruling party to reject this move in one voice. The government is exploring new sites near Bathinda and Patiala to set up nuclear power plants in Punjab. Pointing out that in 2016 too, the Centre looked for possible sites in Punjab for setting up nuclear power plants, the Sikh groups held that the then Punjab government rejected the proposal. Present day Punjab -the border state sandwiched between two hostile nuclear-ready nations presented a disturbing possibility of being converted into a theatre of war.

India aims at adding 1,190 MW of hydropower capacity in the current year, which will take the total capacity to more than 50,000 MW. India has 45,399 MW of large hydel plants and 4,594 MW of small ones. Last year, the government had targeted hydel capacity addition of 840 MW but it managed to achieve only 140 MW. This year, central sector NEEPCO aims at adding the highest capacity of 600 MW at Kameng Hydel Power project in Arunachal Pradesh. The government of Himachal Pradesh will be adding another 211 MW in the state. According to the schedule prepared by CEA the country is likely to cross the 50 GW installed capacity mark this month if NEEPCO manages to commission its proposed unit 1 and 2 of the Kameng project. During April and May, hydel projects generated 13 percent of the total power generated by conventional power generation capacity including thermal, nuclear and hydel. Hydel generation achieved a near 38 percent growth in comparison to the previous corresponding period. Last year, hydel power plants achieved a 7 percent year-on-year growth in power generation at 135 bn kWh. They contributed 10 percent of the total power generation for the year among conventional power generation sources. At present, the largest hydel generation capacity is in north India at 19.7 GW followed by south at 11.77 GW. West India has a total installed capacity of around 7.55 GW followed by east at 4.94 GW.

Rest of the World

Eliminating fossil fuels from the US power sector, a key goal of the "Green New Deal" backed by many Democratic presidential candidates, would cost \$4.7 tn and pose massive economic and social challenges, according to a report released by energy research firm Wood Mackenzie. The report is one of the first independent cost estimates for what has become a key issue in the 2020 presidential election, with most Democrats proposing multi-trillion-dollar plans to eliminate US carbon emissions economy-wide. The report focuses solely on what it would cost to green the US power sector, a top contributor to greenhouse gas emissions – but does not include costs for other sectors like transport, agriculture or manufacturing. The study said 900 GW of energy storage would be required to make sure wind and solar assets can work reliably even when the weather isn't cooperating, 900 times more than is currently installed.

As renewable energy powers up in South Korea, coal-fired generation, long the bedrock of the country's electricity supply, is being tapped to give up room. Facing choking smog in its major cities and under pressure to meet emission reduction targets, the world's fourth-biggest coal importer is expected to accelerate targets for green energy in an updated 15-year energy plan later this year. South Korea began its transition to cleaner energy in a 2017 power supply plan that aimed to boost the share of renewables from about 6 percent to 20 percent by 2030, while scaling back coal and unpopular nuclear. The 2019 energy plan is expected to reflect the push for even more renewables and more gas-fired power at the expense of coal, imported from countries such as Indonesia, Australia and Russia. Over the next 15 years, the government had initially planned to retrofit some 20 of these with anti-pollution gear when they reached 30 years of age in a bid to extend their operating lifespan, but this has been shelved. The government last year introduced caps on coal-fired generation, halting operations at five plants from March to June to curb pollution and it has done the same this year for four plants. Still, South Korea is facing a tough task to boost renewables and meet its planned carbon emission cuts under the 2015 Paris climate accord. The country scores poorly with green groups on its efforts so far to tackle climate change, with the independent Climate Change Performance Index released at last year's climate talks in Poland putting it 57th out of 60 countries that were rated.

Germany needs to ease restrictions on the location and size of solar power plants and wind turbines and increase incentives if the country is to meet a target demanding it double renewable energy capacity by 2030, energy companies said. Germany has set a target of generating 65 percent of its power from renewable sources by 2030, requiring an increase in wind and solar generation capacity to between 215 and 237 GW from 120 GW now. Renewables account for about 40 percent now. The government wants to achieve 61 percent CO_2 emissions reductions by 2030 over 1990 levels, which requires 65 percent of power generation to come from renewables. It is also working to cut CO_2 emissions from transport, building and agriculture. It is committed to bringing in a climate law this year that demands more action from polluting industries. German utility industry association BDEW has been pushing for the capacity of offshore wind turbines to be raised to 17 GW each by 2030 from 15 GW, a limit set because of the German North and Baltic Sea's sensitive maritime environment and fears about adverse effects on tourism. Private bank Metzler said Germany would experience an investment boom in renewables to deliver on the 65 percent target by 2030 and 77 percent target by 2038, when it aims to have closed coal-fired plants.

Portugal's huge auction of solar energy capacity drew a demand about nine times the offered 1,400 MW, requiring a second phase to decide the winners of almost all licenses and the government expecting an investment of up to €1 bn. The investors had sought as much as over 10,000 MW of new capacity. Out of 24 locations to install solar panels, only one found no bids, and one had an instant winner, while 22 licenses will require auctions where bidders offering the largest discount off the energy tariff will win. It is the largest licensing auction of any kind of energy launched in Portugal and represents more than double the current installed capacity of solar energy in the country.

Enhancing zero-carbon energy is an urgent task as the Japanese government aims to derive 44 percent of power from renewable and nuclear power by 2030. The use of solar has been growing rapidly in Japan, but still, when we look at the power mix ratio in 2016, renewables other than hydroelectric, such as solar and wind, accounted for only 7 percent, compared with 8 percent for hydro.

The Czech government has given preliminary approval for a plan by a subsidiary of electricity producer CEZ to build a nuclear power station with the government providing guarantees to help it secure cheaper financing. CEZ is 70 percent state-owned and has previously declined to invest in nuclear alone given high costs and unclear returns. A decision on construction of a unit at the Dukovany site is still years away with suppliers expected to be chosen by 2024. While the government is keen to build new nuclear power stations, it does not want to pick up the bill, while CEZ has insisted that any investment makes a return for its owners, including minority interests. The investment into the initial unit with about 1,200 MW output is expected to be billions of dollars.

Solar energy developer Lightsource BP has acquired a large number of projects in Brazil with a potential to nearly double its current global capacity. The London-based firm, in which BP holds a 43 percent stake, said it bought 1.9 GW of projects from independent renewables developer Enerlife for an undisclosed sum. The utility-scale solar projects are at different stages, from early land permits to more advanced developments with grid connections. Solar power contributes just over 1 percent of Brazil's total electricity generation, which is expected to soar in the coming decades. The Brazilian government awarded licenses for new power generation projects that would add 402 MW of capacity by 2023 at record-low price for solar generation. Enerlife was awarded over 160 MW in five solar projects. Lightsource BP is the largest European utility solar developer with over $3 bn invested across nearly 2 GW of solar projects around the world.

International and local companies are among 24 bidders pre-qualified to build the world's largest single-site solar plant in Abu Dhabi, EWEC said. Abu Dhabi, the capital of the United Arab Emirates, is building a new 2000 MW solar PV power project. The successful bidder or consortium would hold a 40 percent stake in the project with the remaining stake held by local entities. EWEC received expressions of interest from 48 leading international and local developers to build the solar project at Al Dhafra in Abu Dhabi. Once completed, the project site will cover an area of 20 square km, almost doubling the capacity of the current largest operational single-site solar PV plant in the world, Noor Abu Dhabi. The new plant is expected to start commercial operations in the first quarter of 2022 and it will lift Abu Dhabi's solar power capacity to 3200 MW.

Myanmar's first commercial solar-power plant in Minbu, Magwe Region, added 40 MW of power to the national grid. The Minbu Solar Power Plant project, which will be completed in four phases, will have the capacity to generate 170 MW of power and produce 350 mn kWh per annum, which is sufficient to electrify about 210,000 households.

Nevada's largest utility NV Energy will procure 1,200 MW of solar electricity paired with batteries, or enough to power about 228,000 homes, as it seeks to double its renewable energy resources and move away from fossil fuels. The addition of energy storage to all three projects underscores how important - and cheap - batteries have become as utilities seek to extend the working hours of their solar facilities. The three solar projects will more than double the utility's renewable energy by 2023, NV Energy said. The projects include a 690 MW array with a 380 MW battery storage system on federal land near Las Vegas. The Gemini Solar project is being developed by Quinbrook Infrastructure Partners and Arevia Power, NV Energy said. In April, Nevada passed a law requiring utilities to source 50 percent of their power from renewable sources by 2030. NV Energy said it has a long-term goal of serving customers with 100 percent renewable energy.

US trade officials said bifacial solar panels, a new technology through which power is produced on both sides of a cell, would be excluded from the Trump administration's tariffs on overseas-made solar products. The announcement was made in a USTR document posted online and is scheduled to be published in the Federal Register, it said. It is the second time US trade officials have announced exemptions to the tariffs, which were imposed in early 2018. The tariff on solar panel imports was set at 30 percent but has since dropped to 25 percent. The USTR late last year excluded some of the products made overseas by SunPower Corp, it excluded two other solar technologies and said it would not consider any additional exclusions.

Spanish utility Iberdrola will launch an Irish retail business and plans to invest over €100 mn ($112 mn) in renewable energy and storage projects in Ireland and Northern Ireland by 2025. The move is part of a company-wide goal to invest around €34 bn to 2022 on renewables and energy network systems and expand in retail markets across Europe. The company will be challenging existing market players such as SSE's Airtricity and Centrica's Bord Gais Energy and plans to attract customers by offering competitive prices and 100 percent renewable electricity as standard. The company will also consider partnering with existing renewable operators and possibly build new projects. Iberdrola announced plans to build a 50 MW battery at the ScottishPower Whitelee wind farm in Scotland, Britain's largest onshore wind farm, and said it plans to develop more storage across its renewable portfolio.

France will double its target for developing offshore wind generation to 1 GW per year from around 500 MW previously as costs are falling. France aims to rapidly boost power generation from renewable wind, solar and other green sources as it seeks to curb its dependence on nuclear power and phase out coal-fired generation to reduce its carbon emissions. In its long-term energy plan presented last year, the government had said it would boost France's offshore wind capacity from zero to 2.4 GW in 2023 and about 5 GW in 2028, at a rhythm of around 500 MW a year. A tender for France's 600 MW Dunkirk offshore wind project has attracted interests from several international energy majors and is showing that costs are falling even faster when projects are well mounted.

The French government plans to increase the amount of nuclear energy utility EDF is forced to sell to its competitors by 50 percent to 150 terawatt hours and is in talks with the European Commission to potentially raise the fixed price. The government aims to have both measures ready before the November auction window of the so-called ARENH market mechanism, under which EDF's rivals bid for wholesale nuclear electricity for the year ahead, the energy ministry said. The ARENH mechanism was set up in 2010 following the liberalization of the French power market to boost competition by giving smaller rivals access to France's cheap nuclear electricity generated by its 58 reactors operated by EDF. After wholesale electricity prices rose sharply last year, the demand from the ARENH window surged as alternative suppliers sought to buy more nuclear electricity at the fixed price of €42 per MWh compared with the average wholesale market price of €54.8/MWh in 2018. EDF's nuclear generation stood at 393.2 TWh last year and it is targeting 395 TWh in 2019. The ARENH mechanism is expected to end in 2025.

The second unit of the Novovoronezh II nuclear power plant south of Moscow has gone into pilot commercial operation, Rosenergoatom, Russia's nuclear utility, has said. The reactor is a VVER-1200, the Russian nuclear industry's flagship product as it seeks to expand its sales abroad. The new Novovoronezh reactor represents only the third of these reactors that has yet gone into service in the world, though Rosatom, Russia's nuclear corporation, has VVER-1200s under construction in Hungary, Belarus and Turkey. Eventually, the Novovoronezh II nuclear plant will consist of four VVER-1200 reactors, which are being built to replace the power production from the five older VVER type reactors at the first Novovoronezh plant. A similar process is underway at the Leningrad Nuclear Power Plant near St Petersburg.

US President Donald Trump has directed members of his Cabinet to review the administration's expanded use of waivers exempting small refineries from the nation's biofuel policy, after hearing from farmers angry about the issue during his recent Midwest tour. Trump's move underscores the rising political importance of the US Renewable Fuel Standard, a more than decade-old law which requires refineries to blend corn-based ethanol into their gasoline to help farmers, but which also provides waivers to small refining facilities that can prove compliance would cause them financial harm. The exemptions represent more than 2 bn gallons of potentially lost demand for ethanol, the biofuel industry said. However, the extent of the actual demand destruction, if any, is a matter of intense debate.

Nepal and Bangladesh have agreed to make joint investments in hydropower projects. The decision was taken at the Energy Secretary level meeting between the two nations which included the projects covered by the whitepaper issued by the previous meeting a year back. The whitepaper issued by Nepal's finance ministry a year back had included 962 MW capacity holding Tamor reservoir, 800 MW Dudhkoshi project which has a reservoir, 725 MW Upper Arun, 450 MW Kimathanka Arun, 679 MW Lower Arun. Likewise, Sunkoshi-II 1,110 MW, Sunkoshi-III 536 MW, Tamakoshi-V 101 MW, Khimti Shiwalaya 500 MW and Kokhajor Reservoir 111 MW also are included in the then issued whitepaper. The whitepaper had enlisted a total of 20 Hydropower projects.

MW: megawatt, kW: kilowatt, GW: gigawatt, mn: million, bn: billion, tn: trillion, FY: Financial Year, EPC: Engineering, Procurement and Construction, IEEFA: Institute for Energy Economics and Financial Analysis, C&I: commercial and industrial, CAGR: compound annual growth rate, PV: photovoltaic, US: United States, EU: European Union, IRENA: International Renewable Energy Agency, SECI: Solar Energy Corp of India, kWh: kilowatt hour, RfS: request for a selection, MNRE: Ministry of New and Renewable Energy, LED: light emitting diode, MWp: megawatt peak, GWh: gigawatt hour, GST: Goods and Services Tax, GIP: Global Infrastructure Partners, BHEL: Bharat Heavy Electricals Ltd, GSECL: Gujarat State Electricity Corp Ltd, PPAs: power purchase agreements, discoms: distribution companies, MSEDCL: Maharashtra State Electricity Distribution Company Ltd, UT: Union Territory, UP: Uttar Pradesh, MWh: megawatt hour, KKNPP: Kudankulam Nuclear Power Plant, AFR: Away From Reactor, NEEPCO: North Eastern Electric Power Corp, CEA: Central Electricity Authority, CO2: carbon dioxide, EWEC: Emirates Water and Electricity Company, km: kilometre, USTR: US Trade Representative, TWh: terawatt hour

BPCL buys gasoline for Kandla in rare move

16 July. Bharat Petroleum Corp Ltd (BPCL) has bought gasoline for Kandla in a rare move to meet demand and plug a supply gap after cancelling an earlier purchase tender. BPCL bought 20,000 tonnes of 91.2-octane grade gasoline at a premium of about $9 a barrel to Singapore quotes on a cost-and-freight (C&F) basis. The fuel is of Euro IV-compliant grade and scheduled for 18-22 July arrival at Kandla port located in Gujarat state of western India. BPCL had previously cancelled a tender to buy 35,000 tonnes of gasoline for 20-24 June arrival at Mumbai but the reasons were unclear. India is undergoing heavy refinery maintenance this year as the country prepares for cleaner fuels from April 2020.

Source: ***Reuters***

Vedanta to invest $650 mn in new oil blocks

16 July. Diversified mining company Vedanta Ltd said it will invest $650 mn in its new oil and gas (O&G) blocks that it won in the government's last two rounds of auctions, CEO (Chief Executive Officer) of its oil and gas division Ajay Kumar Dixit said. It had won a total of 53 O&G blocks under the government's open acreage licensing policy (OALP) and Discovered Small Field (DSF) rounds, Dixit said. The company intends to invest ₹200 bn ($2.9 bn) in exploration and production of O&G over the next three years which includes its existing and new fields, Vedanta's chairman Navin Agarwal said.

Source: ***Reuters***

Decline in LPG demand pulls down India's fuel consumption in June

16 July. Decline in consumption of liquefied petroleum gas (LPG) by 7 percent in June 2019 pulled down India's overall fuel consumption for the month by 2 percent to 17,678 thousand metric tonne (tmt), as compared to 17,981 tmt recorded in the corresponding month a year ago. LPG demand in the same month declined to 1,794 tmt as compared to 1,931 tmt recorded in the corresponding month a year ago. This would be the first year-on-year decline in LPG consumption after November 2018. Moreover, LPG demand in the first quarter (April-June) of financial year 2019-20 declined by 1.5 percent to 5,753 tmt as compared to 5,843 tmt recorded in the corresponding quarter a year ago. According to data sourced from oil ministry's statistical arm, LPG penetration in the country crossed 94 percent as of June 2019.

Source: ***The Economic Times***

QUICK COMMENT
Decline in LPG demand post polls suggests poll related boost in demand!
Ugly!

IOC threat to stop jet fuel supply to Air India resolved

16 July. A threat by Indian Oil Corp (IOC) to stop jet fuel supplies to Air India at some airports was resolved after a late intervention from the ministry. The state-run refiner threatened to stop supplies at six airports, including Pune, Vizag and Chandigarh, due to payment defaults by the airline. The cash-strapped airline has been struggling to make payments. It had a debt of more than ₹540 bn last year when the government tried to sell a 76 percent stake in the airline.

Source: ***The Economic Times***

Diesel most expensive in Rajasthan after 4 percent VAT increase

15 July. Sale of diesel is significantly going down continuously in the state owing to increasing diesel prices. It is now most expensive in north India after increase in 4 percent VAT (Value Added Tax). Earlier, diesel was most expansive in Srinagar of Jammu and Kashmir (J&K). Despite increasing number of vehicles, the state is witnessing negative growth in sale of diesel every year. The diesel dealers in the state attributed it to the increasing VAT in the state which makes diesel expensive in comparison to neighbouring states, especially Uttar Pradesh. According to the figures provided by RPDA

(Rajasthan Petrol and Diesel Association) of prices, diesel is most expensive in Jaipur in comparison to capital cities and other major cities of north India states. In Jaipur, diesel was sold at ₹71.24 per litre, while in Srinagar it was sold at ₹70.4 per litre. However, in Lucknow, it was sold at ₹65.62 per litre, Chandigarh sold it at ₹63.46 per litre and in Gurugram, it was available at ₹65.81 per litre. In Noida and Ghaziabad, it is sold at ₹65.72 and 65.59 per litre. In Delhi, one has to shell out ₹66.69 per litre. Prices of diesel in Jalandhar, Ambala and Jammu remained at ₹65.51, 65.45 and 67.45 per litre, respectively.

Source: ***The Economic Times***

ONGC in a fix as government asks it to sell Gujarat golf courses with oil wells

14 July. The government wants Oil and Natural Gas Corp (ONGC) to sell its golf courses in Ahmedabad and Vadodara in Gujarat, sending the company into a tizzy as one of them has two producing oil wells. A recent exercise by DIPAM (Department of Investment and Public Asset Management) to assess land banks and other non-core assets of government departments as well as central PSUs (Public Sector Undertakings) identified two of ONGC's golf courses in Ahmedabad and Vadodara, as also a sports club owned by Bharat Petroleum Corp Ltd (BPCL) in Chembur, Mumbai. The exercise identified only properties with real estate potential in prime cities while leaving out golf courses ONGC has in Ankleshwar in Gujarat and Rajahmundry in Andhra Pradesh. It also did not prioritise the grand golf course Oil India Ltd (OIL) has in Assam and one ONGC has in the North-East. While the golf courses are used by executives of the PSUs for playing the leisurely game and hosting their business partners, ONGC had built the one in Ahmedabad after it struck oil in the city more than two decades back. After the Motera field was discovered in Ahmedabad, ONGC was wary of encroachment around the oil wells in a city that was developing into a megapolis. The golf course identified by DIPAM has two producing oil wells. The field exists in a nomination block that according to rules ONGC cannot sell off or farm-out to outsiders.

Source: ***Business Standard***

Reduction of government stake in oil companies a credit negative: Moody's

12 July. The government's latest plan to reduce stake in select state-run companies including oil and gas firms could be credit negative for Indian Oil Corp (IOC), Bharat Petroleum Corp Ltd (BPCL) and Oil India Ltd (OIL), rating agency Moody's Investors Service said in a report. According to the rating agency, a change in policy along with ₹1.1 tn disinvestment target indicate that the government's direct ownership could fall below 51 percent in the state-owned oil companies - Oil and Natural Gas Corp (ONGC), IOC, BPCL and OIL, who had a market capitalization of ₹4.5 tn as on 5 July 2019. Analysts said that reducing stake in state-owned oil and gas Public Sector Undertakings may leave less room for these companies to divest their cross-holdings. Finance Minister Nirmala Sitharaman had said the government was considering the option of taking its stake below 51 percent to an appropriate level on a case-by-case basis in companies that have to be retained under state control.

Source: ***The Economic Times***

India saved ₹590 bn of LPG subsidies due to direct transfer

12 July. India saved cooking gas or LPG (liquefied petroleum gas) subsidies of the order of ₹590 bn in five years since 2015 due to the implementation of the direct benefit transfer scheme PAHAL (Pratyaksh Hastantarit Labh) that allowed elimination of fake or inactive connections and reduced leakages apart from the "Give It Up" campaign that urged well-to-do consumers to surrender gas connections. The government has been able to eliminate 42.3 mn duplicate, fake and inactive LPG connections while the "Give It Up" campaign resulted in 10.3 mn Pradhan Mantri Ujjwala Yojana (PMUY) beneficiaries, who were above the poverty line,

QUICK COMMENT

Saving on LPG subsidies would not have been substantial without oil price decline!

Bad!

giving up their respective subsidies, according to the Union budget documents. The PAHAL scheme for direct transfer of LPG subsidy was launched in 54 districts across the country in November 2014. It was later extended to the rest of the country in January 2015. Under the Scheme, LPG cylinders are being sold at non-subsidised price and subsidy, if eligible, is being directly transferred to the consumers' bank account. Around 247.2 mn LPG consumers have joined the scheme so far. The government also managed to save an additional ₹82.65 bn up to April 2019 on subsidized kerosene due to staggered increase of retail selling price by ₹14.73 per litre. The government has been trying to cut down kerosene usage by gradually increasing the prices and decreasing the fuel's allocation to states. The centre's allocation of PDS Kerosene to states dropped 28 percent in 2017-18. Similarly, a reduction of 12 percent was aimed for 2018-19. The allocation for the first quarter of the current financial year has also been reduced by 12 percent.

Source: *The Economic Times*

Government raises commission for LPG distributors by ₹11 for every 14.2 kg cylinder

11 July. The petroleum ministry has increased the commission for distributors of liquefied petroleum gas (LPG) or cooking gas by ₹11.26 for every 14.2 kilogram (kg) cylinder and ₹5.63 for every 5 kg cylinder, effective 1 August. This is the steepest hike in seven years and will be implemented in phases over three months ending 1 October this year. The hike is based on the recommendations of a study for revision in LPG distributors commission conducted by Indian Institute of Management, Ahmedabad in consultation with the oil ministry's statistical arm Petroleum Planning and Analysis Cell (PPAC). Post the revision, the commission will rise to ₹61.84 kg for each 14.2 kg cylinder and ₹30.92 for a 5 kg cylinder. The commission will be hiked first by 50 percent or ₹5.62 per kg for 14.2 kg cylinder on 1 August followed by a 25 percent hike or ₹2.82 on 1 September and finally by 25 percent on 1 October. The hike in case of 5 kg cylinders will follow the same timeline and percentage revisions. The country had 23,737 dealerships at the end of April 2019. Uttar Pradesh houses the most number of LPG distributors at 4,052 followed by 2,134 in Maharashtra, 1,799 in Bihar, 1,567 in Tamil Nadu, 1,450 in Madhya Pradesh and 1,333 in Rajasthan.

Source: *The Economic Times*

India's crude oil production falls 7 percent in May, pushes import dependence to 85 percent

10 July. India's crude oil production in May this year fell 7 percent to 2,800 thousand metric tonne (tmt) due to fall in production from fields operated by Oil and Natural Gas Corp (ONGC), Oil India Ltd (OIL) and private operators. The fall in domestic crude oil production pushed the country's crude oil import dependence to 85 percent in the month as compared to 83.8 percent recorded in the corresponding month a year ago. ONGC invited private participation to help the company boost hydrocarbon production from 64 nomination marginal fields. Cumulatively, domestic crude oil production decreased 7 percent to 5,519 tmt during the first two months (April-May) of the current financial year (2019-2020), as compared to the corresponding period a year ago. ONGC's crude oil production in May fell more than 4 percent to 1760 tmt. Cumulatively the company's domestic crude oil production in the first two months of the present financial year fell 5 percent to 3,450 tmt. According to the oil ministry, major reasons for lower production were less offtake by consumers in Tripura, Cauvery and Rajahmundry. OIL, the second government-owned oil and gas explorer posted a 4 percent fall in its oil production to 274 tmt. Cumulatively, the company's crude oil production during the first two months of the current financial year dropped 4 percent to 539 tmt. The major reasons for the slippage was less than planned contribution from work over wells and drilling wells. Crude oil production from private players and joint ventures fell 13 percent to 767 tmt during the month of May. Cumulatively production by this segment dropped 12 percent to 1,529 tmt during the first two months of the current fiscal. The drop in production is attributed to lower production from Cairn Oil and Gas fields in Mangala, Bhagyam, Aishwariya and Raageshwari Deep Gas due to operational issues and delays.

Source: *The Economic Times*

India to launch rules to end gas distributors' monopoly in 34 areas

16 July. The Indian government will introduce rules in six months that could lead to the phase-out of monopolies controlled by natural gas distribution companies in 34 cities, including New Delhi and Mumbai, allowing consumers to choose a new supplier. In 2009, India's Petroleum and Natural Gas Regulatory Board (PNGRB) gave exclusive gas marketing rights, initially for five years, to companies who had established gas distribution networks in cities across the country as a way to recover their costs along with exclusive rights to use the networks for 25 years. However, the regulator will open the marketing business to competition, Satpal Garg, a PNGRB board member who is in control of its commercial and monitoring responsibilities, said. The rules will be ready in three months, and implementation would take another three months as the regulator will first seek feedback from companies and the public, Garg said. The move could affect the business of GAIL (India) Ltd, the biggest gas distributor in the country. GAIL has direct or indirect control of many of the single-city distributors, such as Mahanagar Gas Ltd in Mumbai, Indraprastha Gas Ltd in New Delhi. Gujarat Gas Ltd may also have rivals moving into the 11 cities in which it distributes gas, including Jamnagar, Ahmedabad, Hazira, Surat and Rajkot in western Gujarat state. Some cities awarded to Indian Oil Corp (IOC) and Adani Gas Ltd would also be open to new distributors, under the new provisions. The PNGRB recently awarded over 130 city gas projects and is hoping that those will involve new investment of ₹1.2 tn ($17.50 bn). Notable winners include GAIL, Adani, IOC, Bharat Petroleum Corp Ltd (BPCL) and Hindustan Petroleum Corp Ltd (HPCL). The companies will provide piped gas to an additional 22.1 mn domestic customers, build 4,600 fuel stations and increase the size of the pipeline network by two-thirds. At the end of March 2019, India daily supplied about 21.1 mn cubic metres of gas to about 5 mn households, 35,000 commercial and industrial clients and for vehicles through 1,700 fuel stations, Garg said.

QUICK COMMENT
Ending gas distributers' monopoly may boost CGD uptake!
Good!

Source: ***Reuters***

AGCL, OIL, GGL sign agreement for setting up of new CGD

11 July. Assam Gas Company Ltd (AGCL), Oil India Ltd (OIL) and GAIL Gas Ltd (GGL) signed an agreement for incorporating a new company for implementation of the City Gas Distribution (CGD) network in five districts of Assam. Assam Industries and Commerce Minister Chandra Mohan Patowary said that with the connection of Assam to the National Gas Grid, steady supply of natural gas shall initiate a spurt in the industrial sector, power generation sector, automotive CNG (compressed natural gas) sector and domestic piped gas to households sector. The supply of piped natural gas (PNG) to the industrial, commercial and domestic customers in the first phase in Kamrup, Kamrup (Metro), Cachar, Hailakandi and Karimganj districts will be a major initiative in this regard, he said. AGCL, along with OIL and GGL had formed a consortium and bid for laying, building and operating the CGD Networks in two geographical areas (GA) in Assam. GA-2 comprises of Cachar, Hailakandi and Karimganj districts and GA-3 comprises of Kamrup and Kamrup (Metro) districts. The joint venture company shall implement the CGD Network and supply piped natural gas to the domestic, commercial and industrial customers and CNG to the vehicles in Kamrup, Kamrup (Metro), Cachar, Hailakandi and Karimganj districts. In these five districts, approximately 4.16 lakh households will be connected with the PNG and 72 CNG stations will be set up in these districts at an estimated cost of ₹17 bn. Around 95,000 households will be connected with the PNG and 21 CNG stations will be set up in Cachar, Hailakandi and Karimganj districts at an estimated cost of approximately ₹5 bn.

Source: ***Business Standard***

India's coking coal imports at 51.8 mt in 2018-19

16 July. The country has imported 51.84 million tonnes (mt) of coking coal in FY19, Parliament was informed. During 2018-19, coking coal import stood at 51.84 mt (provisional), Coal Minister Pralhad Joshi said. The government has taken steps in order to increase availability of coking coal. Coal India Ltd (CIL) has planned to increase coking coal output from 34.12 mt to 52.95 mt by 2019-20. CIL also plans to set up nine new coking coal washeries by 2020-21.

Source: ***The Economic Times***

Burning for over 100 yrs, Jharkhand's underground coal fire draws SC's attention

16 July. As thousands sit on top of an active volcano, an underground coal fire burning for more than 100 years in Jharia in Jharkhand's Dhanbad district has finally drawn the attention of the Supreme Court (SC). The court recently noted that nothing substantial had happened in the matter since 2009, while calling for the latest status report from the Director General of Mines Safety, Dhanbad, so as to understand how to proceed further. It directed the central government to submit its affidavit to demonstrate steps taken by them in terms of their action plan, to control the fire as well as rehabilitation of the residents there. This report by the amicus has to be in respect of the areas covered by both Bharat Coking Coal Ltd (BCCL) and Eastern Coalfields Ltd (ECL). The first fire in Jharia coalfield was reported in 1916. What caused it however remains unknown. Jharia continues to be a source of high quality coal in India, thereby supporting the iron and steel industry.

Source: ***News18***

Demand to raise royalty on coal in Rajya Sabha

15 July. Demands to raise royalty on coal, roll back of steep hike in airfares between Kerala and Gulf region and government intervention to help release fishermen captured by Pakistan were among issues raised during the Zero Hour in Rajya Sabha. Amar Patnaik (BJD) said the rate of royalty paid to state governments on coal produced in states was last changed in April 2012 and as per rule was due to be revised in April 2015 but was not done. The issue was placed before the GST (Goods and Services Tax) Council but is yet to be approved, he said, adding instead a cess was imposed which goes to indivisible pool that is not devolved to states. He demanded that royalty on coal should be raised to 20 percent from the current 12 percent.

Source: ***The Economic Times***

Uttar Pradesh discoms not to sign new coal power contracts for 3 yrs

13 July. Power distribution companies (discoms) from Uttar Pradesh (UP) will not sign new long-term coal based power contracts for the next three years to avoid the burden of fixed costs and to optimise their current agreements. Industry experts said, though UP accounts for around 10 percent of the country's power demand, the decision of the state government will not adversely affect power generators since there have been no long-term agreements in the industry for almost a decade. Long-term power contracts are those signed for more than seven years. UP Electricity Regulatory Commission has ordered power distribution companies to procure long-term renewable power through competitive bidding and to contract hydro-power or battery storagebased power if it is economical.

Source: ***The Economic Times***

Madhya Pradesh government plans to set up coal power plants amid stress in sector

11 July. The Madhya Pradesh (MP) government is planning to set up 2640 MW of greenfield coal-fired power plants. The state government will invite private power producers to bid for the right to build these assets and the power will be sold exclusively to the state. The proposal, by the MP Power Coordination Committee, is awaiting approval from the state cabinet. The committee has proposed procuring 2640 MW through competitive bidding (2 plants of 1320 MW each) while another 1320 MW of capacity will be added to the state by MP Power Generating Co Ltd plants at two locations, 660 MW at Satpura and Amarkantak each. The target for the additional capacity to come on stream is FY2024-25, according to the committee.

Source: ***Livemint***

SCCL plans to produce 10 mt of coal from Naini block in Odisha

11 July. Singareni Collieries Company Ltd (SCCL) is chalking out plans to produce 10 million tonnes (mt) of coal per annum from Naini coal block in Odisha even as production is expected to commence from February 2021. Drilling, which is part of the preparatory work, has been taken up at two places in the coal block area. It has been decided that permission of the Odisha government and the forest department are to be obtained by March 2020 and coal production is to start by February 2021. The Naini Block is estimated to have 340 mt of coal reserves.

Source: ***The Economic Times***

NTPC terminates coal mining contract with BGR over allegations of corruption

10 July. NTPC Ltd has terminated contracts it had awarded to BGR Mining & Infra Ltd for development of its coal mines in Jharkhand and Chhattisgarh over allegations of corruption against senior officials of the private mining company. NTPC has terminated contracts for development and operation of Chatti-Bariatu coal mine in Jharkhand and Talaipalli coal mine in Chhattisgarh, according to two separate letters dated 4 July 2019 sent by the state-owned company. The state-owned firm had awarded mine and development contract of the Chatti-Bariatu mine to BGR in November 2017. Chatti-Bariatu mine was supposed to produce 7 million tonnes (mt) of coal a year for use at NTPC's 1,320 MW Barh power plant for generation of electricity. Talaipalli coal mine was to produce 18 mt of coal per annum for use at NTPC's 4,000 MW Lara Power Project.

Source: ***The Economic Times***

NATIONAL: POWER

Soon, pay power bills via net, card, get 1 percent discount in Goa

16 July. The Goa electricity department will reward domestic consumers with a 1 percent rebate for non-cash payment of power bills from 1 August. The rebate will be available to consumers paying with plastic money as well as those paying their bills online, Power Minister Nilesh Cabral said. The department is working with SBI to accept bill payments 24X7. Cabral said that the department is working to provide 24-hour power supply to consumers, but added that this would take four years. Cabral said that the department would provide relief to households consuming fewer than 100 units of power by charging them ₹1 per unit instead of the current ₹1.40. The department will play around with the tariff slabs to distinguish between those consuming up to 100 units and those consuming more than 300 units. The Joint Electricity Regulatory Commission (JERC), which is entrusted with rationalizing the tariff and responsible for regulating the power sector, will take a decision on this. The department will also ask JERC to approve a rate of ₹4 per unit to those producing solar power through net metering and selling it to the department.

Source: ***The Economic Times***

Gujarat, Madhya Pradesh spar over power generation

16 July. The Madhya Pradesh government has objected to a decision of the Narmada Control Authority (NCA) to halt production of electricity at the River Bed Power House of the Sardar Sarovar Project (SSP-RBPH). NCA consented to Gujarat's request in April this year to halt power generation at the SSP-RBPH so that the reservoir could be filled to capacity this monsoon. Operating the river bed power house at the dam site requires release of water in downstream areas of the reservoir. The Madhya Pradesh Power Management Company Ltd will incur a loss of ₹2.29 bn because of the proposal to halt power generation at the dam site.

Source: ***The Economic Times***

Andhra Pradesh government orders review of PPAs during Naidu's tenure

16 July. Implying anomalies in certain deals, the Government of Andhra Pradesh has decided to review the Power Purchase Agreements (PPAs) entered into during the five-year tenure of past government led by TDP chief N Chandrababu Naidu. Chief Minister (CM) Y S Jaganmohan Reddy has been speaking about the review since day one of assuming office. However, with the Centre writing two letters within a span of a month urging the state government to desist from reviewing the PPAs, the matter has turned into a sensitive issue. Ajeya Kallam, the principal advisor to the CM of Andhra Pradesh, said that during the past five years, PPAs are entered in wind and solar energy sectors. Kallam clarified that those PPAs are agreed for exorbitant prices. The then state government made agreements for 25 years for exorbitant prices which were non-existent in any other parts of the country. Kallam said that only five companies are responsible for 70 percent of PPAs.

Source: ***The Economic Times***

Despite weak monsoon, power cut not likely in Kerala till 31 August

15 July. Nonetheless the extraordinarily weak monsoon and its spiteful impact on the hydel power generation in the state, the KSEB (Kerala State Electricity Board) is unlikely to declare power cut or load shedding till 31 August. The board currently generates only 10 to 12 mn units of power on a daily basis from hydel power stations within the state. Under the present circumstances, the board would be able to maintain this power generating ratio till 31 August, provided a set of other conditions too remain favourable.

Source: ***The Economic Times***

State power map shows Nagpur district has most power plants

15 July. The state government has decided to set up two new 660 MW units in Koradi even though the district already has five power plants having total installed capacity of 7,230 MW of which 6,450 MW is operational. The need for new thermal units is itself questionable given the massive solar capacity addition being done. According to MSEDCL (Maharashtra State Electricity Distribution Company Ltd), the new units are coming up as old units would be decommissioned in the coming years. MAHAGENCO (Maharashtra State Power Generation Company) has stated that the two 660 MW units are replacement of four old decommissioned 120 MW units and a 210 MW unit. MAHAGENCO had earlier planned to set up two 800 MW in Umred but could not acquire land. The decision is also questionable as several private power plants are lying idle in the state. Instead of going in for new units, MAHAGENCO can simply these plants. A 1,350 MW power plant belonging to RattanIndia is lying idle in Sinnar in Nashik district. Power Finance Corp had urged MAHAGENCO to buy it but the request was turned down. Nashik district has only one power plant belonging to MAHAGENCO and the second power plant would have distributed the pollution load. The power plants are concentrated only in Nagpur and Chandrapur districts.

Source: ***The Economic Times***

Government to pay damages to consumers for load sheddings: Singh

15 July. Union Power Minster R K Singh said the aim of the Centre is to have "One Nation One Grid" and pay damages to consumers in case of load sheddings. The government will soon go ahead with structural reforms to achieve the objective of "One Nation One Grid", Finance Minister Nirmala Sitharaman had said. The ministry would seek the Union Cabinet's nod for the power tariff policy in next few days, which would provide for penalty for unscheduled power cuts except in the case of technical faults or act of God (natural calamities), Singh had said. Sitharaman had announced in the budget that a package for the power sector would soon be brought by the government. The government intends to provide '24x7 Power to All' at affordable rates. Therefore, there would be a provision in the tariff to cap transmission and distribution losses. Once the tariff policy is approved, the distribution companies would not be allowed to pass on these losses beyond 15 percent.

Source: ***The Economic Times***

Power discoms will have to pay users for power cuts: Singh

12 July. Soon all power distribution companies (discoms) in the country will have to compensate consumers for unscheduled power cuts used by cash-strapped state utilities to artificially reduce demand and avoid buying additional electricity. Discoms have to pay penalty for power cuts not caused by technical faults or natural disasters. It (compensation) should be credited into their accounts, Union Power Minister R K Singh said. The move is part of the government's efforts to ensure the states fulfil their commitment of 24x7 power supply they gave by signing the 'Power for All' document. The penalty will be the second tough measure taken by the ministry in recent times to discipline discoms, after tough norms for timely payments by discoms to power stations. However, industry players have expressed scepticism, saying it will be hard to determine wilful blackouts, most of which will be passed off as technical faults.

Source: ***The Economic Times***

Power prices rise nearly 50 percent at Indian Energy Exchange

12 July. Power prices at the Indian Energy Exchange (IEX) rose ₹1.16 per unit or almost 50 percent, during the last five days on the back of a near 60 percent rise in demand propelled by increased buy bids from South India. Some states have been asked to supply power 24x7 leading to increased buying from the exchange. Power prices during the 9 pm – 10 pm slot was highest at ₹7.45 per unit as demand outstripped supply by almost 25 percent for the slot. Average market price was ₹2.41 per unit which inched up to ₹3.57 per unit. Demand for power was 119.57 mn units which shot up to 190.23 mn units. According to IEX, demand from states like Andhra Pradesh, Kerala, Telengana and Tamil Nadu has resulted in the surge in prices. Tamil Nadu registered the highest demand among southern states.

Source: ***The Economic Times***

BSES geared up for mishap-free power supply to Delhi in monsoon

10 July. Delhi electricity distribution company (discom) BSES said that it was geared up to ensure incident-free power supply to its over 42 lakh consumers in the national capital and issued an advisory to the public on adopting simple safety precautions during the rainy season. The discom said it has undertaken extensive preventive maintenance works to minimise the accumulation of moisture in grids and panels. It also advised customers to caution their children from playing near electricity installations, even if they are barricaded, and not play in parks that are water logged. The discom said that customers should get the entire wiring in their premises thoroughly checked by a licensed electrical contractor. Emphasising that power theft by hooking on to an electricity system poses a serious safety hazard, BSES also urged customers to report incidents of power theft and convince people not to illegally draw electricity by hooking on to mainlines or roadside electrical equipment. The discom urged customers to alert BSES in case somebody comes across any fallen cable, pole, exposed wiring or digging work on the roadsides. Apart from the 24x7 call centre, consumers can reach BSES through its emergency numbers at 1800-10-39707 for BSES Rajdhani Power Ltd (BRPL) and at 41999808 for BSES Yamuna Power Ltd (BYPL) or through its mobile app.

Source: ***The Economic Times***

NATIONAL: NON-FOSSIL FUELS/ CLIMATE CHANGE TRENDS

India's decentralised renewables workforce to double by 2022-23

16 July. India's decentralised renewable energy (DRE) sector--which generates, stores and distributes renewable energy locally--could employ nearly 100,000 more people by 2022-23, according to a new report. While most of these jobs are expected to be long-term, women constitute only a quarter of the workforce in this sector. The renewable energy sector created 47,000 new jobs in India in 2017, employing 432,000 people, according to a report by the inter-governmental International Renewable Energy Agency, IndiaSpend reported on 5 July 2018. The solar photovoltaic industry was the largest employer of all renewable energy technologies, accounting for close to 3.4 mn jobs worldwide, including 2.2 mn in China and 164,000 in India, it said. It is estimated that project developers and installers--companies that generally work with larger projects ranging from a few hundred watts to a few kilowatts--provided about 770 direct, formal jobs and 190 direct, informal jobs to deploy 9.5 MW of standalone and grid-tied solar in 2017-18. By 2022-23, the number of direct, formal jobs in this area is expected to rise 108 percent to 1,600 and direct, informal jobs by 111 percent to 400. Over a five-year period till 2022-23, the government plans to deploy 1.75 mn solar water pumps through the Kisan Urja Suraksha evam Utthaan Mahabhiyan (farmers' energy protection scheme) or KUSUM scheme, it said. Of India's targeted 175 GW renewable energy capacity by 2022, the government plans to produce 100 GW. Of this, India has achieved 30 GW of utility and rooftop solar capacity, and the remaining 70 GW would add 220,000 jobs in the sector. Only 25 percent of the direct, formal jobs are held by women in the end-user product provider segment--in line with the average (23 percent) in the three countries surveyed. In India, women reportedly make up just 11 percent of the rooftop solar sector's workforce compared to 32 percent globally.

Source: ***Business Standard***

No plan to completely ban petrol, diesel vehicles: Pradhan

16 July. The government has no plans to ban petrol and diesel vehicles in the near future but will continue to push for greater use of electric vehicles (EVs) with a view to cut oil imports and save the environment, Oil Minister Dharmendra Pradhan said. Conventional energy sources of coal and oil constitute more than 80 percent of India's energy basket and the demand for energy will continue to grow as the country's economy expands further. The Niti Aayog has reportedly proposed that after 2030, only electric vehicles should be sold in India. A panel headed by Niti Aayog Chief Executive Officer Amitabh Kant had earlier suggested that only EV (three-wheelers and two-wheelers) with an engine capacity of up to 150 cc should be sold from 2025 onwards. The policy think-tank believes that a move to allow salve only EVs from 2030 will expand the scope of the clean fuel technology beyond two-and three-wheelers in the country. India consumed 211.6 million tonnes (mt) of petroleum products in 2018-19. Of this, diesel consumption was 83.5 mt and petrol 28.3 mt. All of the petrol and bulk of diesel is consumed by automobiles, including cars, buses and trucks. Pradhan said transport remains the most demanding sector for oil and such a wide base of automobiles will need a combination of fuels. While the country will switch to the usage of ultra-clean BS-VI grade petrol and diesel, meeting emission standards equivalent to euro-VI fuels, from 1 April 2020, the government is aggressively pushing for increased usage of CNG (compressed natural gas) by automobiles particularly in public transport.

Source: ***Business Standard***

BHEL bags ₹1 bn EPC order from NTPC to set up solar power plant

14 July. BHEL (Bharat Heavy Electricals Ltd) said it has bagged a ₹1 bn order from NTPC Ltd for setting up a 25 MW floating solar photovoltaic (PV) power plant at Simhadri in Andhra Pradesh. The plant will be set up on the raw water reservoir of NTPC's Simhadri Thermal

Power Plant, BHEL said. With this order, BHEL said, it has emerged as the largest EPC (Engineering, Procurement and Construction) player in the floating solar PV segment in India with a portfolio of 130 MW. It is offering EPC solutions for both off-grid and grid-interactive ground mounted, rooftop, floating solar & canal top solar plants, with current portfolio of more than 1 GW of SPV plants. BHEL said that it has been contributing significantly to the nation's green initiatives for developing and promoting renewable energy over the past three decades. Space-grade solar panels using high efficiency cells and space-grade battery are being manufactured at its electronics systems division, Bengaluru.

Source: ***The Economic Times***

Chandigarh to set up solar power plants in gardens and schools

14 July. In a bid to achieve the solar power generation target set by the Ministry of New and Renewable Energy (MNRE), Chandigarh Renewal Energy, Science and Technology Promotion Society (CREST) has planned to install solar plants at gardens and government schools. CREST has decided to set up two solar plants of 400 kWp (kilowatt peak) capacity at two government schools in Maloya and 160 kWp plant at a botanical garden in Sarangpur. Recently, the administration had approved a detailed project report (DPR) of installation of 800 kW solar power plant worth ₹45 mn at the parking area of New Lake in Sector 42. Out of 800 kW, 90 kW solar energy will be reserved for charging e-vehicles. It will be a first-of-its-kind charging station for electric vehicles in Chandigarh. Besides, CREST has also planned a 3 MW solar plant on N-choe, a seasonal rivulet that passes through Garden of Springs, Sector 53, at the southern end of the city. The UT (Union Territory) administration under its model solar city project, has also planned to install 8 kW solar plant the city forest (Nagar Van) near Sukhna Lake, which will provide power supply to run three water fountains there. The administration had recently notified extension of solar plants in Chandigarh by 30 September.

Source: ***The Economic Times***

Environment ministry panel on hydropower projects violating SC order: Tamil Nadu CM

11 July. Tamil Nadu Chief Minister (CM) K Palaniswami told Union Environment Minister Prakash Javadekar that the Expert Appraisal Committee for River Valley and Hydro Electric Projects under his ministry is violating the final order of the Cauvery Water Disputes Tribunal and the Supreme Court (SC) judgement. In a letter to Javadekar, Palaniswami said the Expert Appraisal Committee for River Valley and Hydro Electric Projects functioning under the Union Ministry of Environment, Forest and Climate Change has included Karnataka's proposal for grant of fresh Terms of Reference to the Mekedatu Balancing Reservoir and Drinking Water Project in its meeting scheduled to be held on 19 July 2019.

Source: ***The Economic Times***

Solar power scheme now open for Tamil Nadu small powerloom units

11 July. Officials at the regional office of textile commissioner in the city said small powerloom weavers in the state could avail of subsidy for setting up solar-powered looms and also benefit from the solar power scheme as the sector has been included under the 'net feed-in scheme'. M Balasubramanian, deputy director at the regional office of the textile commissioner in the city, said the state had in March this year given a notification that the net-metering system in solar power would also be applicable to the powerloom sector. Small powerloom units, which have up to eight looms, could avail a minimum of 50 percent subsidy under the Powertex India Scheme for setting up the infrastructure required for solar power generation. Under the net feed-in system, two electricity metres would be installed - a bi-directional meter for measuring the power imported from and exported to the gird, and another one for measuring the generated solar power. Every imported unit costs around

₹4.6 and for every unit exported to the grid anywhere between ₹2.6 to ₹2.8 would be waived from the total tariff. Officials, however, said the net feed-in scheme was brought in by the Tamil Nadu Electricity Regulatory Commission, as they had to account for operational costs and losses incurred while distributing power.

Source: ***The Economic Times***

Delhi to shut down Rajghat thermal power plant, use its land for solar park

11 July. The Delhi government has decided to "officially" shut down the Rajghat thermal power plant and use its land to develop a 5,000 kilowatt (kW) solar park, Deputy Chief Minister Manish Sisodia said. The decision to close down the plant, where power generation was stopped due to pollution concerns in 2015, was taken during a meeting of the Delhi Cabinet, Sisodia said. The coal-based plant, having a power generation capacity of 135 MW and located at Yamuna bank, was commissioned in 1989.

Source: ***The Economic Times***

Suntuity Group announces foray into Indian renewable energy market

10 July. US (United States)-based solar solutions provider Suntuity Group announced its foray into the Indian renewable energy sector with the commissioning of its maiden project in Maharashtra. The Suntuity Group develops, finance, build, own and operate residential, commercial and utility-scale renewable energy solutions across the world. The company has installed over 250 MW of solar PV (photovoltaic) since its formation in 2008. Suntuity installs over 4,000 residential solar systems every year in the US.

Source: ***The Economic Times***

Government waives duty on products imported for nuclear plants

10 July. With rising focus on reducing dependency on carbon-based fuel for electricity generation, the government has waived off basic customs duty (BCD) for a clutch of products which are imported for nuclear power plants and allocated more funds in atomic energy research. The present installed nuclear power capacity of 6,780 MW is seen to reach 13,480 MW by FY25. The development comes with gross budgetary support towards nuclear fuel inventory rising 37 percent year-on-year to ₹31.22 bn. The Department of Atomic Energy (DAE) imports uranium ore concentrate from firms in Kazakhstan and Canada, and a Russian company supplies enriched uranium pellets and fuel pellets of natural uranium di-oxide. The country had spent around ₹18 bn in FY17 in buying these items. India has signed inter-governmental agreements with 17 nations, some of which are nuclear supplier countries.

Source: ***The Financial Express***

Jakson Group to set up 50 MW greenfield solar plant for ₹3 bn in Uttar Pradesh

10 July. Solar energy company Jakson Group is investing nearly ₹3 bn in a solar power plant in Jhansi district of Uttar Pradesh. The 50 MW independent power plant, spread over 300 acres, is projected to be operational in 18-24 months. The focus of the central and state governments on green and renewable energy, including electric vehicles, had provided the much needed boost to the sector, which is projected to grow substantially owing to proactive policies and consumer demand. Meanwhile, Jakson is expecting its solar energy portfolio to touch 1 GW soon, including 150 MW of captive installations. India is targetting total solar energy capacity of 100 GW by 2022. In line with the ambitious target, the different states have also begun to work up their green energy portfolio. Recently, Prime Minister Narendra Modi had also laid emphasis on renewable energy, including solar power, and electric vehicles for cutting on annual oil import bill of almost ₹6 tn.

Source: ***Business Standard***

UAE plans oil trade overhaul to boost Middle Eastern clout

16 July. The UAE (United Arab Emirates)'s ADNOC, long seen as one of the most conservative oil firms in the Middle East, plans an overhaul for its trading operations as it seeks to emulate the success of rival oil majors and bolster its regional influence. The company has splurged on hiring former employees of private-sector peers and wants to launch a regional oil benchmark, possibly this year, similar to international markers Brent and WTI (West Texas Intermediate). The plan is not yet finalised and still has to be approved by UAE authorities, such as the Abu Dhabi Supreme Petroleum Council. The UAE, the third-largest oil producer in the Organization of the Petroleum Exporting Countries (OPEC), behind Saudi Arabia and Iraq, pumps around 3 mn barrels per day (bpd). It plans to boost output to 4 mn bpd by 2020. Most of that oil is produced by ADNOC, based in the country's capital, Abu Dhabi. ADNOC is considering dropping destination restrictions on all of its oil and allowing it to trade freely on the open market, as part of a broader transformation to become more proactive and adaptive to market changes. ADNOC is venturing into oil trading as part of an international expansion aimed at securing new markets.

Source: ***Reuters***

Iraq's southern oil exports average 3.42 mn bpd so far in July

15 July. Iraq's oil exports from its southern ports have reached 3.42 mn barrels per day (bpd) so far in July. Exports from its southern Basra terminals fell to 3.39 mn bpd in June from 3.441 mn bpd in the previous month. Repair works at a section of a marine pipeline in the Gulf which transports crude oil to the Basra ports slowed shipments for three days in mid-June.

Source: ***Reuters***

China's Sinopec sets up fuel oil unit in Sri Lanka

15 July. China Petroleum and Chemical Corp, known as Sinopec Corp, said it has set up a fuel oil company in Sri Lanka as it looks to supply fuel to ships along a major maritime route. The new unit, called Fuel Oil Sri Lanka Co Ltd, has been registered in Hambantota on the southern tip of the country. Sinopec stressed the strategic location of Hambantota port on the Indian Ocean along a key shipping route between the Suez Canal and the Malacca Strait, which is transited by two-thirds of global oil shipments.

Source: ***Reuters***

Iran will continue its oil exports under any conditions: Foreign Minister

14 July. Iran will continue its oil exports under any conditions, Iran's Foreign Minister Mohammad Javad Zarif said. Zarif said Britain should quickly release the Grace 1 oil tanker, which was seized by British Royal Marines off the coast of the British Mediterranean territory of Gibraltar on suspicion of violating sanctions against Syria.

Source: ***Reuters***

Most Louisiana refineries running as storm cuts 70 percent of offshore oil

14 July. Tropical Storm Barry slowly moved on to the Louisiana coast and quickly weakened from hurricane strength, leaving in its wake 70 percent of US (United States) Gulf of Mexico oil production shut in, the US government said. The Louisiana Offshore Oil Port, the only US location loading and offloading giant oil tankers, was operating normally. The one shut refinery, Phillips 66's 253,600 barrel per day (bpd) Alliance, Louisiana, plant, was not significantly affected by Barry as it came ashore, the company said.

Source: ***Reuters***

Mexico faces headwinds to growth as oil production slows: Fitch Solutions

13 July. Mexico will face "significant headwinds" for economic growth, as slowing activity in its oil and gas sector weighs on industrial production, Fitch Solutions Macro Research said. Mexico's industrial activity declined by 3.1 percent, seasonally adjusted, in May from the year-earlier month, the country's national statistics agency reported earlier. Fitch Solutions said that while Mexican President Andres Manuel Lopez Obrador has allotted more funding for Pemex in recent months, that would likely have a limited impact in the near term and production would continue to decline.

Source: ***Reuters***

Aker BP makes oil discovery off Norway

12 July. Norwegian oil firm Aker BP has made an oil discovery off Norway which could strengthen its hand in negotiations with sometimes partner Equinor on how to develop fields. Aker BP, formed from a merger of BP's Norwegian oil assets and the Det norske oil firm controlled by billionaire Kjell-Inge Roekke, said it had made an oil discovery with its Polish partner LOTOS. The find is estimated to hold between 80 mn and 200 mn barrels of recoverable oil equivalent (boe), in an area with several oil and gas discoveries, nicknamed NOAKA. Up to 700 mn boe are in place overall at the discovery, called Liataarnet, but Aker BP needs to do more work to find out how much it can extract, the company said.

Source: ***Reuters***

IEA sees oil market oversupplied in 2019 on US production

12 July. Surging US (United States) oil output will outpace sluggish global demand and lead to a large stocks build around the world in the next nine months, the International Energy Agency (IEA) said. The forecasts appear to predict the need for producer club OPEC (Organization of the Petroleum Exporting Countries) and its allies to reduce production to balance the market despite extending their existing pact, forecasting a fall in demand for OPEC crude to only 28 mn barrels per day (bpd) in early 2020. The demand for OPEC crude oil in early 2020 could fall to only 28 mn bpd, it said, with non-OPEC expansion in 2020 rising by 2.1 mn bpd — a full 2 mn bpd of which is expected to come from the US. At current OPEC output levels of 30 mn bpd, the IEA predicted that global oil stocks could rise by 136 mn barrels by the end of the first quarter of 2020. The IEA said that markets were concerned by escalating tension between Iran and the West over oil tankers leaving the Gulf but that incidents in the region's shipping lanes have been overshadowed by supply concerns. Tightened US sanctions on Iranian crude drove down Tehran's June exports by 450,000 bpd to 530,000 bpd, near three-decade lows.

Source: ***Reuters***

Colombia's Hocol signed four oil contracts for $100 mn investment

12 July. Hocol, a unit of Colombian state-owned oil company Ecopetrol, signed four contracts on Thursday for oil exploration that will require a total investment of some $100 mn, the company said. Holol and Chile-based GeoPark will jointly develop the Llanos 86, Llanos 87 and Llanos 104 oilfields in three of the contracts, investing between $80-$100 mn over the next three years to drill six exploratory wells, Holol said. Holol won the contracts during an auction last month, part of a series of bidding rounds by the state hydrocarbon agency aimed at revitalizing Colombia's long-stagnant oil sector and generating $1.5 bn in investments in coming months. The country's crude reserves were up 9.9 percent last year to 1.96 bn barrels, or equivalent to 6.2 years of output. The government wants to increase reserves to at least 10 years equivalent.

Source: ***Reuters***

Dominican Republic expects to award several blocks in first oil licensing round

10 July. The Dominican Republic's first oil licensing round will be a success if it awards more than two of the 14 blocks on offer this year, a government official said at an event disclosing the Caribbean nation's fiscal terms. The licensing round, which began with disclosure of contract terms, comes after Brazil, Guyana and Mexico attracted billions of dollars in oil investment. Cuba and Panama also have taken steps to lure producers with new areas and by making seismic exploration data available. Dominican Republic offers simple terms that provide low risk and low cost of entry for operators willing to commit to minimum investment, Alberto Reyes, Dominican Republic's vice minister of hydrocarbons, said. Licensing terms include a minimum investment of $2 mn for onshore blocks and $4 mn for offshore blocks. Bidders can propose their own geographic blocks in the next two months if they do not like the original areas, he said. About a dozen major oil producers, including US (United States), Chinese and European companies, have expressed interest in bidding, Reyes said.

Source: *Reuters*

Australia's Woodside starts commissioning at Greater Enfield oil project

10 July. Australia's Woodside Petroleum Ltd has started commissioning activities at the $1.9 bn Greater Enfield oil project off the state of Western Australia. Oil from the project is expected to be sought after by traders in Asia. Australian crude similar to the quality expected from Greater Enfield is selling at record premiums as the oil, in limited supply, can be blended directly with high-sulfur fuel oil to reduce its sulfur content to 0.5 percent to meet new marine fuel specification for the shipping industry. The project included the development of new oil resources and linking them to an existing oilfield called Vincent.

Source: *Reuters*

INTERNATIONAL: GAS

Brazil plan to open gas sector seen luring Naturgy, Engie, others

16 July. Recently announced plans to foster competition in the Brazilian natural gas market may trigger a wave of privatizations among state-controlled distribution companies, luring international and domestic bidders, experts on the sector said. Brazil's Cosan SA and Spain's Naturgy Energy Group SA, are among the companies potentially interested in the segment, which also include Portugal's Galp, France's Engie and Spain's Repsol, consultants, lawyers and other experts said. The plan to overhaul Brazil's domestic natural gas market, approved by Brazil's energy policy council in late June, calls for companies with a "dominant position" to sell all of their stakes in distributors. Petrobras has struck a deal with local antitrust authority to sell of its gas transportation and distribution assets by 2021. Petrobras holds minority stakes in state-owned gas firms through its subsidiary Gaspetro, in which Japan's Mitsui holds a 49 percent stake.

Source: *Reuters*

EU slaps sanctions on Turkey over gas drilling off Cyprus

16 July. European Union (EU) Foreign Ministers turned up the pressure on Turkey after approving an initial batch of sanctions against the country over its drilling for gas in waters where EU member Cyprus has exclusive economic rights. The Ministers said that in light of Turkey's "continued and new illegal drilling activities," they were suspending talks on an air transport agreement and would call on the European Investment Bank to "review" it's lending to the country. Turkey's Foreign Minister Mevlut Cavusoglu issued his own warning that his country would step up drilling activities off Cyprus if the EU moved ahead with sanctions. Two Turkish vessels escorted by warships are drilling for gas on either end of ethnically divided Cyprus.

Source: *Voice of America*

European gas prices exceed Asian spot LNG, shuts arbitrage

15 July. European gas hub prices have risen above the price of liquefied natural gas (LNG) on the Asian spot market in a rare occurrence that largely rules out arbitrage of LNG cargoes from the Atlantic to the Pacific basins. Dutch and British month-ahead gas prices exceeded Asian spot LNG in April for the first time in four years. Asian LNG prices tend to be higher due to the huge demand there with few alternative supplies. The switch in the price values is another twist in a unique year for the fast-expanding commodity as soaring production from new plants, much of it in the US (United States) Gulf Coast, coincides with tepid demand from Asia, normally consumer of 75 percent of global LNG. Month-ahead Dutch gas was $4.56 per million metric British thermal units (mmBtu) and the British equivalent was $4.48 per mmBtu, while Asian spot LNG for August was heard at

$4.40 per mmBtu. Dutch and British month-ahead gas prices soared in part due to a string of planned outages in Norway, although their 38 percent to 44 percent gains in the past two weeks have not fully reversed the prolonged 66 percent percent fall since last October.

Source: ***Reuters***

Saudi Aramco eyes tie-up with Russia's Lukoil in Uzbek gas

15 July. Saudi Aramco is interested in a partnership with Russia's Lukoil on two natural gas projects in Uzbekistan. It also said Lukoil was interested in jointly working with Saudi Aramco in international projects.

Source: ***Reuters***

Indonesia approves Inpex's plan for $20 bn Masela LNG project

12 July. Indonesia's energy ministry has approved a revision by Japan's Inpex Corp of its development plan for the $20 bn Masela natural gas project, upstream oil and gas regulator SKK Migas said. Regulator Chairman Dwi Soetjipto said the details of the approved plan were the same as agreed in a deal signed, including the timeline, estimated costs and fiscal conditions. Inpex had to revise the gas block development plan, causing years of delay, after a government order in 2016 to move the project inland, versus the earlier plan for development offshore. The Japanese oil and gas company, which controls 65 percent of the project, is expected to proceed with their final investment decision for the project, Soetjipto said. The liquefied natural gas (LNG) plant, which will have a capacity of 9.5 million tonnes (mt) per year, is expected to start operations in 2027, Soetjipto said.

Source: ***Reuters***

Europe gas trade volume on track for another record in 2019

12 July. European gas trading volumes this year may beat the record 52,604 terawatt hour (TWh) recorded in 2018 due to growth at the Dutch, German and Italian gas trading hubs, research firm Prospex said. Last year's volume rose 5 percent and trading across 11 markets monitored by Prospex increased by at least 10 percent in the first half of 2019 compared with the same 2018 period. Prospex said that volume growth on Dutch gas exchange Title Transfer Facility remains dominant, more than offsetting a continued decline on Britain's National Balancing Point (NBP). The two account for 80 percent of European wholesale gas trading. Wholesale trading has picked up in recent years as the region's gas resources fall and more liquefied natural gas (LNG) arrives. The NBP serves as the trade hub for LNG arriving into British terminals, but also all exchange futures trading and price risk management for markets in Britain denominated in sterling. As global gas prices increased by around 20 percent last year, the total European gas trading value in 2018 amounted to €1,190 bn ($1.34 tn), up 35 percent and exceeding €1 tn for the first time ever. The Netherlands, Britain, Germany, France, Italy and Belgium are the leading markets in that order.

Source: ***Reuters***

INTERNATIONAL: COAL

Coal plants sale fails to attract any bids: Greece's PPC

15 July. Greece's electricity utility Public Power Corp (PPC) said it has received no binding bids for three coal-fired plants it is selling as part of reforms Athens has agreed with its lenders to help open up its electricity market. After an inconclusive tender in February, PPC, which is 51 percent owned by the state, has relaunched the sale and has received six expressions of interest. The latest deadline for the submission of binding bids expired earlier.

Source: ***Reuters***

China June coal output hits record high as miners ramp up ahead of summer

15 July. China's coal output rose in June from the previous month to a record high, as miners ramped up production to ensure supply ahead of peak summer demand for electricity. The world's top coal producer churned out 333.35 million tonnes (mt) of coal in June, up 6.7 percent from May and up 10.4 percent year-on-year, data from the National Bureau of Statistics showed. Output over the first half of 2019 reached 1.76 billion tonnes (bt), up 2.6 percent from the same period last year.

China's state planner and energy administration have asked miners, especially big producers in Shanxi, Shaanxi and Inner Mongolia, to step up production of high-quality coal to meet increasing demand. Meanwhile, Beijing has been approving new coal mining capacity in recent months despite a push to promote clean energy and reduce its carbon footprint.

Source: ***Reuters***

King coal rules in Japan as power utilities in thrall to low-cost fuel

12 July. Japanese utilities will rely on the return of coal-fired power plants from maintenance to meet peak electricity demand this summer, highlighting the country's dependence on the more polluting fuel instead of natural gas. Coal-power stations capable of producing 10,437 MW of electricity will be fired up in the next few weeks, a survey of the companies shows. The return of these units illustrates Japan's inability to shake off coal as a mainstay fuel for its power generation despite pledges to reduce carbon emissions under the 2015 Paris climate agreement and even as the country remains the world's largest liquefied natural gas (LNG) buyer. Coal remains the cheapest fuel source for Japanese utilities as long-term contracts for cleaner burning LNG have risen this year since they are tied to the price of crude oil, which is up 25 percent in 2019. As a percentage of Japan's generation units, Japan's gas-fired power capacity is nearly double that of coal. But utilities rely more on coal as a so-called baseload source, providing a continuous supply of electricity, while gas units are typically ramped up quickly to meet surges in demand. Coal power is expected to provide 285.7 bn kilowatt hours of electricity in the year through March 2020, an increase of 3.3 percent over the previous twelve months, according to supply plans submitted by utilities and generators to the government and published by Japan's power grid monitor. Japanese utilities typically put coal stations into maintenance in between the winter and peak demand seasons.

Source: ***Reuters***

INTERNATIONAL: POWER

NERC proposes 3 ways to improve power supply in Nigeria

15 July. The Nigerian Electricity Regulatory Commission (NERC) proposed three ways to improve power supply and reduce power outages in the country. The Vice Chairman of the Commission, Engr. Sanusi Garba, stated this during a public consultation programme with Electricity consumers in Kaduna State. The theme of the event is: "Capping of Estimated Billing, Distribution Franchising and Competitive Transition Charge". The three methods outlined in the theme of the event remains the lasting solutions to the power problem facing the country. Normally, electricity consumers should all have access to meters, over 50 percent consumers are not metered and some consumers are either under-served or not served at all. Energy theft is the major contributor of high tariffs, some consumers' by-pass meters without paying their bills. While speaking on capping of estimated bill, Yusuf Ibrahim of the Consumer Affairs Division of NERC mentioned that lack of adequate meters results to arbitrary billing. He noted that bulk metering which normally results to bulk disconnection was not fair to consumers who pay their bills adding that bill capping would ensure fair power bill to those without metres. He urged distribution companies to provide full information to their customers on how they could obtain a meter. Similarly, Engr. Abdullahi Bello who spoke on Distribution Franchising stated that the franchising would improve investment in power networks and ensure better service. He said that Distribution Franchising would serve as an avenue for communities or stakeholders to get involve and control their power supply through investment. Another speaker, Abba Terab said that competition transition change would ensure competitive markets, customer's fair billing and investors would have good returns.

Source: ***Pulse Nigeria***

INTERNATIONAL: NON-FOSSIL FUELS/ CLIMATE CHANGE TRENDS

China greenhouse gas emissions soar 50 percent during 2005-2014

15 July. China's climate-warming greenhouse gas emissions hit 12.3 billion tonnes (bt) in 2014, up 53.5 percent in just a decade, the environment ministry said. China's carbon emissions data is notoriously opaque, but as a signatory to the United Nations (UN) Framework Convention on Climate Change, Beijing is obliged to submit an official inventory to the UN on a regular basis. It has previously released figures for 2005 and 2010. As the world's biggest greenhouse gas producer, China is aiming to bring its total emissions to a peak by "around 2030", though it has also pledged to show "the highest possible ambition" when it reviews its targets next year. The 2014 figure, based on the most recent calculations by the Chinese government, includes China's emissions of greenhouse gases such as carbon dioxide and methane, but does not make adjustments based on changes in land use or increases in forest coverage. The environment ministry said if the impact of forests and other "carbon sinks" were taken into consideration, total emissions would have stood at 11.186 bt in 2014, still up 17 percent from 2010.

Source: *Reuters*

German North Sea wind power output rose 16 percent in January-June: TenneT

15 July. Power production from German North Sea wind farms from January to June totalled 9.51 terawatt hours (TWh), 16 percent more than in the same 2018 period, grid company TenneT GmbH said. TenneT, the German arm of the bigger Dutch transmission network group, said offshore wind from North Sea turbines had retained a 15 percent share of Germany's total wind power production of nearly 64 TWh in the six months. The company plays a key role in the sector because it is responsible for linking North Sea wind farms to onshore grids in the states of Lower Saxony and Schleswig Holstein. Its German North Sea connection capacity already outstrips that of existing wind parks and will grow to nearly 9 GW by 2024 from 6.2 GW in 2018, it said.

Source: *Reuters*

China sets 2019 subsidies for large-scale solar power projects at $248 mn

11 July. China has estimated government subsidies for centralised solar power projects in 2019 at 1.7 bn yuan ($247.64 mn), involving total installed capacity of 22.79 GW, the National Energy Administration (NEA) said. A total of 3,921 projects in 22 provinces and cities have received approvals for the applicable subsidies, the NEA said. Centralised solar power stations are large-scale arrays of photovoltaic cells as opposed to smaller rooftop arrays. The new subsidy is part of a system of fixed subsidy amounts the Chinese government implemented this year for solar projects. China did not allocate any subsidies for centralised solar stations in 2018 as Beijing tried to ease a payment backlog that stands at 120 bn yuan. This year China will also allocate 750 mn yuan worth of subsidies for rooftop power projects and for additions under the "photovoltaic poverty relief" programme that aims at alleviating rural poverty and promoting clean energy.

Source: *Reuters*

Morocco prepares to launch tender for 230 MW solar plant in Atlas mountains

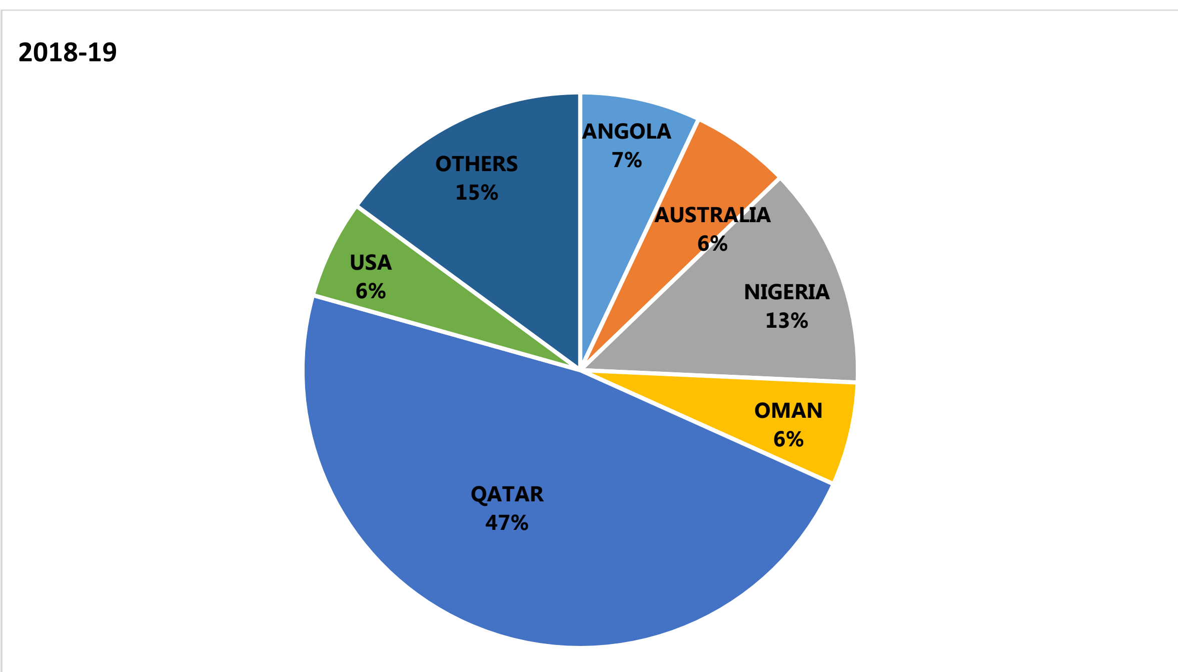
10 July. The Moroccan agency for sustainable energy (Masen) said it opened the first stage in a tender process to build, operate and maintain a 230 MW solar plant near the town of Midelt in the Atlas mountains. Applications for the pre-qualification round of the Noor Midelt II project are open until 16 September, the agency said. Morocco plans to exceed 52 percent of renewable energy in the national energy mix by 2030. Both plants will use concentrated solar plant (CSP) and photovoltaic (PV) technologies, Masen said.

Source: *Reuters*

DATA INSIGHT

India's LNG Imports from Different Countries

Country	Quantity (Million Tonnes) for 2018-19
Algeria	0.21
Angola	1.51
Australia	1.25
Cameroon	0.27
Equatorial Guinea	0.88
Malaysia	0.26
Nigeria	2.78
Oman	1.30
Qatar	10.26
Trinidad	0.37
UAE	0.37
UK	0.21
USA	1.23
Others	0.64
Total	**21.54**



Source: Compiled from Ministry of Commerce & Industry

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