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If coal cess will not increase power prices, economics text books must be corrected!

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Volume XII

Issue 38

4 March 2016

[OIL PRODUCTION CUTS: DAMNED IF YOU DO AND DAMNED IF YOU DON'T!]

"Fears of the oil crises leaking into other sectors of the economy began growing in February. This was puzzling. If a dramatic increase in oil prices is among key causes of an economic recession, a dramatic fall in oil prices cannot also be among causes of an economic recession. One or the other statement must be inaccurate..."

[RENEWABLE
ENERGY /
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OBSERVER RESEARCH FOUNDATION

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- Govt distributes over 70 mn LED bulbs under DELP scheme
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- No hike in power tariff due to doubling of coal cess: Goyal
- Budget 2016: Nuclear sector welcomes ₹ 30 bn yearly allocation
- Budget 2016: Govt to auction ₹ 900 bn UMPPs before March
- Coal Ministry focusses on bringing auctioned mines to production
- UP govt announces mini grid power policy for state
- Poland, India to ink pact on cooperation in coal mining
- Four coal sector unions call for strike on March 29:
 Govt
- CIL to increase coal production to 1k mt in next 4 yrs: Goval
- Power Ministry may issue taxfree bonds to fund hydropower plants
- UDAY scheme solution to CIL surplus: Govt
- Reliance Sasan UMPP to get compensation for water charges & coal cess

[INTERNATIONAL: OIL & GAS]

Upstream.....

- Genel to take about \$1 bn impairment on Iraqi Kurdistan field
- San Leon abandons 6 gas-exploration permit requests in Spain
- BP says 2015 oil output in Azeri projects down to 31.3 mt
- US oil explorers idle rigs as world looks for shale cuts
- CNOOC invites bids for 18 offshore exploration blocks in China
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- Eni to develop Coral gas discovery offshore Mozambique
- Total starts production from Vega Pleyade, Argentina
- Warburg Pincus to invest up to \$500 mn in RimRock
 Oil & Gas
- Jura announces potential Badin IV South gas discovery in Pakistan

Downstream.....

• Oil refineries' booming profits set to slow this year

Transportation / Trade......

- Oil prices waver as China factory slump cancels out output dip
- Petrobras gets \$10 bn Chinese loan in oil supply deal
- Turkey starts repairs on Iraqi Kurdish oil pipeline as violence flares
- Azerbaijan says construction of TAP pipeline to begin in March
- Russia's Gazprom cuts gas supplies to Turkey by 10 percent
- Iran seeks oil barter as European buyers face banking hurdles
- US exports first shale gas as LNG tanker sails from Sabine Pass terminal

Policy / Performance.....

- Russia's Gazprom aims for more gas auctions in Europe this year
- Pakistani PM cuts petrol price by ₹ 8.4 per litre
- Saudi says to work with oil producers to limit market volatility
- Oil to average just over \$40 a barrel in 2016
- Oil prices 'totally unacceptable', Nigerian President tells Qatar's ruler
- China's natural gas consumption up nearly 18 percent in January: NDRC
- EDC provides C\$750 mn in emergency funds to O&G firms
- Norway oil firms deepen cuts to 2016 investment plans
- Russia says proposed oil output freeze should last at least a year
- Bulgaria investigates possible fixing of fuel prices
- Mexico says oil prices won't recover until second half of 2017

[INTERNATIONAL: POWER]

Generation.....

- Japan's Marubeni eyes \$3.5 bn power plant deal in Egypt
- Pakistan, China to build 350 MW coal power plant in Karachi
- Engie to divest 13 GW of power generation assets
- Russian lends \$1.3 bn to Cuba to build four 200 MW power plants

Transmission / Distribution / Trade.....

• EIB lends £500 mn to upgrade power grids in England

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- Japan's NRA approves Takahama 1 and 2 safety standards
- Duke gains approval for \$1 bn plan to convert coal plant
- DEWA launches smart power plant
- Chile plans power interconnection to Peru

[RENEWABLE ENERGY / CLIMATE CHANGE TRENDS]

NATIONAL.....

- Himachal Pradesh identifies 12 sites for wind energy plants
- Budget 2016: Coal cess in line with India's climate commitments
- Meenakshi energy donates solar pumps
- Suzlon bags 71 MW order for wind turbine generators from GIPCL
- WTO rules against India in solar power dispute
- Tata Power wind power project gets forest clearance in
 Karnataka

GLOBAL.....

- Japan to stipulate 80 percent emission cut goal by 2050
- France's solar PV capacity reached 6.5 GW in 2015
- Japan plans biggest test of carbon capture north of quake site
- Ontario plans to raise \$1.4 bn from carbon pricing program
- China picking winners in solar industry with backing for Yingli
- Oil industry sees Paris climate deal as chance to innovate
- EU eyes interlinked carbon markets from California to China
- China asks for urban ban on high-sulphur diesel in clean fuel push
- US unveils \$40 mn initiative to develop better materials for clean energy
- Alsons plans \$650 mn investment in renewables in the Philippines
- US EPA chief warns rules will challenge oil, gas
- Guangdong plans to include new industries in carbon exchange

[WEEK IN REVIEW]

COMMENTS.....

International monthly energy briefing: February 2016

Oil Production Cuts: Damned if you Do and Damned if you don't!

Lydia Powell, Observer Research Foundation

Conventional Fuels

Oil & Gas

As crude oil prices continued to fall, the prospect of cooperation between OPEC and Russia to contain production volumes was opened in the first week of February. Russian oil output stood at a post-Soviet record high of 10.88 million barrels per day (mbpd) in January. Given the history of Russia's unfulfilled promises to cut production to sustain prices during the 1998 Asian financial crisis, the 2001 terrorist attacks on USA and the more recent 2008 financial crisis, oil producers and oil sector investors who are eagerly awaiting signals on an increase in crude prices would be ill advised to pin hopes on anything concrete emerging from these talks. Russia has consistently got away with the explanation that production cuts in freezing temperatures would result in irreversible damage to its fields. Furthermore even if the Russian state did impose production cuts and blocked transport through the Transneft pipeline system Russian oil is likely to reach the market through other means of transport as it has done historically. This time may not be very different.

Oil company results were reported to be showing heavy stress. BP reported the worst ever loss of \$6.5 billion for 2015. ExxonMobil reported revenue of \$16.1 billion but this was a 50% reduction over earnings in the previous year. According to Wood Mackenzie decommissioning of oil rigs is accelerating in the North Sea. It says that 50 oil & gas fields may shut permanently. A report from Deloitte said that 175 of the 500 publicly traded oil companies that it reviewed were in trouble with more than \$150 billion debt.

Saudi Arabia was reported to be in talks with China's CNPC and Sinopec for joint ventures in refining. Some observers interpreted this as Saudi Arabia's attempt to replicate its strategy of investing in US refineries in the oil price collapse of the late 1990s to maintain its US export volumes. The competition between Saudi Arabia and Russia for oil market share in China was reported to be heating up. Russia is said to have increased its market share from 10% in 2014 to 12% in 2015 with a 28% increase in exports to China. On the other hand, Saudi Arabia's market share is said to have fallen from 20% in 2012 to 15% in 2015.

Signals from China did not help global oil prices. Manufacturing data from China was reported to be less than optimistic with the purchasing managers index (PMI) falling to 49.7 in December 2015 and 49.4 in January 2016 (values below 50 indicate contraction). January was reported to be the sixth consecutive month for PMI contractions in China. Fears of the oil crises leaking into other sectors of the economy began growing in February. This was puzzling. If a dramatic increase in oil prices is among key causes of an economic recession, a dramatic fall in oil prices cannot also be among causes of an economic recession. One or the other statement must be inaccurate.

The Obama administration was reported to be planning a proposal for a \$10/bbl tax on oil production to raise money for investment in public transportation and clean energy. The probability of this bill becoming law is not seen to be very high.

Among other causalities of the oil price collapse was Nigeria which was reported to be in line for a \$15 billion loan from the World Bank to make up for its budget deficit. Jorge Luiz Zelada, former Director of Petrobras International Business Division was reported to have received a sentence of over 12 years in prison for charges of corruption and money laundering.

Meanwhile Iran was reported to have begun shipping oil to Europe for the first time in many years. The CEO of GE was also reported to have paid a visit to Iran recently which increased speculation on US investments in Iran. By the end of the month, oil prices appeared to stay around \$30/bbl with some speculating that the happy days of \$40/bbl oil was just around the corner. Oil output from the USA is reported to be about half a million barrels lower than last year.

On the gas front, one of the most interesting piece of news was the release of a proposal by the European Commission that called for a more centralised authority over energy deals. The idea was that bilateral deals between any EU member and a third party (such as Gazprom) would require EU approval. This was seen by observers as a reaction to the Nord Stream pipeline expansion that carries Russian gas to Germany. Another item that made the headlines was Cheniere sending out its first cargo of LNG from Sabine Pass to Brazil. When gas prices were high LNG leaving the US shores was awaited like the second coming of Jesus but now that prices have tumbled it was seen more as the sighting of the fifth horseman. Other horsemen of the LNG apocalypse such as the \$54 billion Gorgon LNG facility in Australia are also reported to be nearing completion with six more projects expected to come online next year. Barring a miracle that revives energy prices, these projects are probably damned if they produce and damned if they don't.

Coal

The fortunes of coal continued to be worse than that of oil and gas as it remained the target for climate enthusiasts. Glencore the world's fourth largest diversified minor announced a \$4.96 billion loss in 2015. The Chinese owned Australian coal company announced a loss and put some of its operations on hold. As always coal did not make it to the headlines like oil despite the seriousness of its troubles. Despite the gloom the industry appeared to be patiently waiting for a reversal of its fortunes.

Power and Renewables

In the USA the sudden death of US Supreme Court judge Antonin Scalia revived hopes of Obama's clean energy plans. As renewables continued their assault on conventional fuels aided by government crutches, Warren Buffet highlighted growing threat to utilities from solar and wind as they drive down wholesale prices. Demand for LNG for power generation fell in Japan as a result of warmer weather, slower economy and the return of three nuclear reactors. The prospect of 21 out of 43 of Japan's nuclear reactors returning to service by 2017 did not help the case for LNG.

Views are those of the author Author can be contacted at lydia@orfonline.org

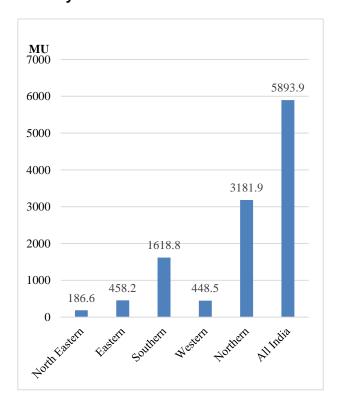
Large and Small Hydro Electricity Scenario in India

Akhilesh Sati, Observer Research Foundation

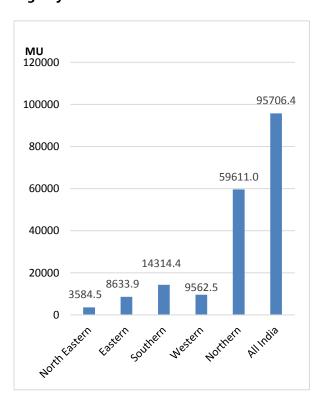
Region	Installed Capacity (MW)		
	SHP (<= 25 MW)	Large Hydro (> 25 MW)	
North Eastern	2331.99	1242.00	
Eastern	1398.13	4289.45	
Southern	6483.13	11397.70	
Western	2930.39	7392.00	
Northern	6605.80	18302.27	
All India	19749.44	42623.42	

Electricity Generation

Small Hydro



Large Hydro



MU: Million Units; 1 Unit = 1 KWh; MW: Megawatt

Source: Lok Sabha (Un-starred Question No. 1996)

NEWS BRIEF

[NATIONAL: OIL & GAS]

Upstream.....

ONGC, OIL extend fall on higher crude oil cess

March 1, 2016. Shares of upstream oil companies like Oil and Natural Gas Corp (ONGC) and Oil India Ltd (OIL) extended selloff to the second day after the government proposed to revise the cess on crude oil, a move which will lower earnings of oil producing companies. Shares of ONGC and Oil India fell 3 percent and 2 percent each respectively. The government has revised Oil Industries Development Cess on domestically produced crude oil from fixed ₹ 4,500 per metric tonne to 20 percent of the total value for domestically produced crude oil. At present upstream oil companies pay a fixed cess ₹ 4,500 per metric tonne on domestically produced crude oil, which comes out to \$9.5 per barrel, analysts said. However, the proposed cess of 20 percent on total value of crude oil may significantly increase the cess for oil explorers if crude oil price increases from around \$30 per barrel to \$100 per barrel. The industry was expecting a cess of 10 percent on total value crude output. Bank of America Merrill Lynch said the revised cess is a big hit for Oil India and ONGC. The brokerage has cut FY17 earnings per share estimates for ONGC and Oil India by 3-5 percent and FY18 EPS estimates by 11-12 percent. (profit.ndtv.com)

India's plans to boost investment in gas blocks seen falling short

February 29, 2016. India announced plans to boost natural gas output by allowing explorers to set gas prices on the basis of imported alternative fuels, but analysts said the measures would not be enough to attract investment. India, which imports about 45 percent of the gas it consumes, wants to ramp up its output and boost demand for cleaner fuel, the Finance Minister Arun Jaitley said. Jaitley said the government was considering providing incentives for gas production from deep-water, ultra deep-water and high pressure-high temperature areas, which remain underexplored due to higher costs. The government plans to provide greater marketing freedom for new gas discoveries and for discoveries in areas that are yet to start production, Jaitley said. However, analysts said the only alternative fuel India imports is liquefied natural gas (LNG), which is linked to crude oil, prices of which have declined by over 70 percent since August 2014. Reliance Industries Ltd (RIL) and Oil and Natural Gas Corp (ONGC) have both called for a rise in domestic gas prices. Reliance has repeatedly warned over the last few years that it would not invest in its gas blocks in the Bay of Bengal in eastern India unless it got market-linked prices. ONGC has similarly claimed its investments at its fields on the eastern coast of India would be unviable if domestic gas prices did not increase. In a reprieve to both firms, finance minister Jaitley said that the government would offer a premium on domestic natural gas prices to gas blocks that have already been discovered. (in.reuters.com)

Gujarat spends ₹ 29.9 bn on gas exploration in KG Basin

February 25, 2016. Gujarat State Petroleum Corp (GSPC) spent ₹ 2,998.08 crore in the last two years on gas exploration in Krishna Godavari (KG) Basin, the state government said. However, the government admitted that gas production is yet to commence after spending the money. State Energy and Petroleum Minister Saurabh Patel said ₹ 2,998.08 crore have been spent by the state government for KG Basin project within last two years. GSPC, a state-owned firm is involved in exploration of gas in the KG basin, he said. He said ₹ 2,052.31 crore have been spent during 2013-14 while ₹ 945.77 crore have been spent in 2014-15. Production of oil or gas is yet to commence in KG Basin, he said. (indiatoday.intoday.in)

ONGC \$500 mn San Cristobal investment deal imminent

February 24, 2016. Venezuela's state oil company PDVSA is about to clinch a deal for Oil and Natural Gas Corp (ONGC) to invest some \$500 million in their San Cristobal joint venture, PDVSA president Eulogio Del Pino said. He said the deal, which has been under negotiation for months, would be signed "soon." The funds would go towards shoring up production at San Cristobal, which has fallen from a peak of over 40,000 barrels per day (bpd) to around 28,000 bpd. The deal is expected to ensure ONGC gradually receives around \$530 million of unpaid dividends, though it could take years for the entire amount to be repaid. The investment is also likely to involve the creation of an offshore account, probably in Asia, to receive the export income. ONGC Videsh Ltd (OVL), ONGC's overseas investment arm, has a 40 percent stake in the San Cristobal oilfield. (in.reuters.com)

IOC buys Russian Urals crude in rare tender

February 29, 2016. Indian Oil Corp (IOC) has bought 1 million barrels of March-loading Urals crude via a tender, the country's first purchase of the Russian grade in a year. Refinery maintenance in Europe has led to an increase in Urals supply and made it economical for the grade to be sold to Asia, traders said. The cargo, to be loaded on March 17-22, was sold by Lukoil's trading arm Litasco at a discount to dated Brent of about \$2 a barrel. IOC bought a Urals cargo in April last year for processing at its Panipat refinery in northern India. (www.business-standard.com)

Transportation / Trade.....

GAIL, Indian Oil team to visit Iran in March for \$4.5 bn undersea gas pipeline

February 29, 2016. The long-proposed \$4.5-billion undersea gas pipeline between Iran and India is likely to get some momentum with a planned visit by key domestic gas buyers, including GAIL (India) Ltd and Indian Oil Ltd, to the Persian Gulf country early March in the backdrop of lifting of Western sanctions. The visit by a team comprising three gas buyers in India, including GAIL and Indian Oil, plans to discuss the cost of the gas that would be acquired through the pipeline and other modalities. There are also plans to transport gas from Central Asian Republic of Turkmenistan to India through this pipeline. If this proposal succeeds, gas from Turkmenistan will be transferred to Iran, and in turn, Tehran will transfer similar quantity to India under a swap agreement between Iran and the Central Asian country. Companies keen to buy gas from Iran will sign supply contracts with National Iranian Gas Export Company (NIGEC). The proposed undersea pipeline would bypass Pakistan's exclusive economic zone and transport up to 31.1 million standard cubic metres per day of gas. (economictimes.indiatimes.com)

India proposes tax relief to foreign companies for local oil sales

February 29, 2016. India proposed to give income tax exemption to foreign companies for storing and selling oil to local refiners, a move that could spur interest from global oil producers in leasing the country's strategic petroleum reserve (SPR) facilities. India, the world's third-biggest oil importer and one of the few major economies still seeing strong demand growth, is building up SPR facilities in southern India to hold 36.87 million barrels of oil. The tax exemption will be applicable from the financial year beginning April 1, provided the foreign company enters into an agreement with the federal government or the arrangement is approved by the government, the government proposed in its annual budget. Oil Minister Dharmendra Pradhan said the United Arab Emirates is keen to use half of the 1.5 million tonnes, or about 11 million barrels, facility at Mangalore. Previously global oil major Royal Dutch Shell and national oil companies of Kuwait, Saudi Arabia and Iran had also showed interest in leasing the facilities, but shied away from signing any deal due to income tax and state levies such as sales tax. It was not immediately clear if the state levies will also be abolished to bring local sales on a par with transactions taking place outside India, where the seller has no Indian tax liability. The 9.75 million barrels Vizag facility in Andhra Pradesh has already been filled with Iraq's Basra oil, while two facilities at Mangalore and Padur in Karnataka are expected to be completed by March and May. (in.reuters.com)

GAIL prunes shopping list for LNG ships as gas prices fall

February 26, 2016. GAIL (India) Ltd is looking at pruning its nearly \$7 billion shopping list for 11 LNG ships due to changed market dynamics in the wake of sharp fall in global gas prices. The company may also have to extend the tender for the vessels to address several concerns raised by prospective bidders with a view to ensuring wider participation. The tender is scheduled to close. GAIL has indicated to prospective bidders that it may not need all the 11 ships in the changed circumstances. With gas prices falling, the economics of ferrying the entire contracted 3.5 million tonne per annum of gas from the US to the Indian market may not work out. Swapping part of the contracted volumes with other countries or selling in alternative markets could be more attractive. With shipping rates down to \$30,000 per day, it may not make economic sense to tie up long-term charters that would be more expensive. Instead, it would suit the company to split its charter portfolio between long-term, mid-term and spot charters as supplies from the two US projects are to start in January 2018. (timesofindia.indiatimes.com)

Asia's oil markets in upheaval as China, India change the game

February 24, 2016. Asia's oil markets are being upended as India's and China's refiners overtake once-dominant buyers like Japan and challenge the United States as the world's biggest consumer. The shifts are not only establishing new trade

routes but are also challenging the way oil is priced in the region as the new players push for more cash cargoes and fewer long-term deals. China and India's combined share of world oil consumption has tripled since 1990 to over 16 percent, nearing the US share of roughly 20 percent, cementing their status as the main center of global demand growth. By 2040, China and India could double their share again to a third, analysts said. One of Asia's rising traders is Indian Oil Corp, which operates 11 refineries with a combined capacity of 80.7 million tonnes a year (1.9 million barrels per day), a third of India's capacity and roughly the same size as Exxon's US refining base. Previously, Asia's largest oil buyers from Japan — which once accounted for about 10 percent of global demand — stuck with long-term contracts. Now, as China and India take the lead, a growing share of trading is done on a spot basis as buyers prioritize cost and delivery flexibility over fixed shipment schedules. Moreover, thanks to the hefty volumes, the new buyers are able to extract favourable prices. China and India's combined daily net crude imports exceed 10 million barrels, or some 3 million bpd more than top importer the United States. The new buyers are also bringing new characteristics to the marketplace. (timesofindia.indiatimes.com)

Policy / Performance......

Oil Ministry can't stop us from exporting crude: Cairn to Delhi HC

March 1, 2016. Cairn India Ltd told the Delhi High Court (HC) that the oil ministry did not have the authority to restrict it from exporting crude from its Barmer oil fields in Rajasthan. No permission or no-objection certificate is required from the oil ministry, lawyer C. A. Sundaram, representing Cairn India, told justice Manmohan. Export of crude is permitted under the foreign trade policy, he said. Earlier, the government had argued that since India was not a crude-surplus nation, it would not be appropriate to allow Cairn India to export crude. Sundaram contended that the government was depending on a 2009 decision through which Cairn India was allowed to sell crude to domestic private entities at international prices, rather than export it. He said the 2009 order could not be extended to force Cairn India to sell to private oil companies at a distress price involving a discount of 25%. He said such sales had adversely impacted Cairn, which invested ₹ 30,000 crore in the project. Cairn India has a production sharing contract with Oil and Natural Gas Corp (ONGC) for its Barmer oil field. The court will hear the government's rebuttal on 15 March. (www.livemint.com)

ATF price hiked by 12 percent

March 1, 2016. Aviation Turbine Fuel (ATF), or jet fuel, price was hiked by 12 percent but that of non-subsidised cooking gas LPG was slashed by ₹ 61.5 per cylinder on global cues. ATF price in Delhi was raised by ₹ 4,174.49 per kilolitre (kl), or 11.88 percent, to ₹ 39,301.31 per kl, oil companies said. The hike comes on back of a steep 12 percent cut in rates from February 1. The jet fuel prices on that day were reduced by ₹ 4,765.5 per kl. The hike breaks the cycle of three consecutive price reductions. Rates were cut by 10 percent on January 1. Rates vary at different airports because of differential local sales tax or value-added tax (VAT). Jet fuel constitutes over 40 percent of an airline's operating cost and the price increase will add to the financial burden on cash-strapped carriers. Simultaneously, the oil firms cut prices of non-subsidised LPG, which consumers buy after exhausting their quota of 12, by ₹ 61.5 per 14.2 kg bottle. Non-subsidised cooking gas (LPG) now costs ₹ 513.50 in Delhi as against ₹ 575 previously. This is the second reduction in rates. Prices on February 1 were cut by ₹ 82.5 per 14.2 kg bottle. Subsidised LPG costs ₹ 419.33 per 14.2 kg cylinder in Delhi. (zeenews.india.com)

Budget 2016: Govt to give 50 mn LPG connections on concessional rate

February 29, 2016. Government will provide 5 crore LPG connections on a concessional rate to below poverty line (BPL) families over three years till 2018-19, Oil Minister Dharmendra Pradhan said. The minister said that average price of single cylinder LPG connection across all the states is ₹ 3,400. Pradhan said we have been providing LPG connections to the BPL families on concessional rates from the fund collected through CSR initiatives. Jaitley said that the government would be requiring ₹ 2,400 crore to provide cooking gas at concessional rate to 1.5 crore BPL families in 2016-17. He said the government will provide these connection to 1.5 crore BPL households in 2017-18 and to 2 crore poor families in 2018-19. The oil minister said the government has plans to provide an equal number of gas connections to non-BPL families over next three years while increasing availability of cooking gas in states like Bihar, West Bengal and Odisha. (energy.economictimes.indiatimes.com)

Budget 2016: Petroleum subsidy reduced to ₹ 269.4 bn from ₹ 300 bn

February 29, 2016. Subsidies on food, fertiliser and petroleum have been pegged lower by over 4 percent to nearly ₹ 2.31 lakh crore for 2016-17. The subsidy bill on food, petroleum and fertilisers is estimated at ₹ 2,31,781.61 crore for 2016-17 fiscal, according to the Budget proposals presented by Finance Minister Arun Jaitley in Parliament. The subsidy bill was ₹

2,41,856.58 crore for 2015-16 (revised estimates). The government has earmarked ₹ 1,34,834.61 crore for food subsidy in the next fiscal as against ₹ 1,39,419 crore in the revised estimate of this fiscal. Petroleum subsidy has been reduced to ₹ 26,947 crore for 2016-17 from estimated ₹ 30,000 crore in the current fiscal. Of ₹ 26,947 crore for next fiscal, ₹ 19,802.79 crore has been earmarked for LPG subsidy and the rest is for kerosene. As per the document, out of total ₹ 51,000 crore allocated for urea subsidy, ₹ 40,000 crore has been earmarked for domestic urea, while the rest is for imported urea. (energy.economictimes.indiatimes.com)

Petrol price cut by ₹ 3.02 per litre but diesel to be costlier by ₹ 1.47 per litre

February 29, 2016. Petrol price has been reduced by ₹ 3.02 a litre while that of diesel increased by ₹ 1.47 a litre, according to oil companies. State-owned fuel retailers Indian Oil Corporation (IOC), Bharat Petroleum Corporation Ltd (BPCL) and Hindustan Petroleum Corporation Ltd (HPCL) revise rates of the fuel on 1st and 16th of every month based on average oil price and foreign exchange rate in the preceding fortnight. (www.nagpurtoday.in)

India's oil demand estimated to grow to 98 lakh bpd by 2040

February 25, 2016. India's oil demand is estimated to grow by 60 lakh barrels per day (bpd), which is the largest projected for any country's oil demand, to 98 lakh barrels per day by 2040, Oil Minister Dharmendra Pradhan said. India consumed 38 lakh barrels per day in 2014, he said. He said that in order to meet the rising demand of oil and gas, the Government has taken various policy initiatives to enhance oil and gas production including inter alia, approving the Marginal Field Policy, linking the transparent new gas pricing formula to the global market, reassessing the hydrocarbon potential in India's sedimentary basins, appraising about 1.5 million sq. km. of un-appraised basins and setting up of National Data Repository. Further, the Government is encouraging Foreign Direct Investment (FDI) to supplement domestic investment and technological capabilities in the petroleum sector. The present FDI policy for oil and gas sector allows 100% automatic route for exploration and production subject to the existing sectoral policy and regulatory framework in this sector. (energy.economictimes.indiatimes.com)

[NATIONAL: POWER]

Generation.....

AP Transco seeks exit proposal from RPower on KUMPP project

February 27, 2016. The Andhra Pradesh Power Transmission Corporation (AP Transco) has asked Reliance Power to submit a "clear exit proposal" for termination of the 4,000 MW Krishnapatnam Ultra Mega Power Project (KUMPP) in the Nellore district. Reliance Power submitted a proposal to the Andhra Pradesh government seeking to exit KUMPP as it could not take up the project originally sanctioned way back in 2007. Reliance Power is currently locked in a legal dispute with the Andhra government over the forfeiture of ₹ 300 crore that the former submitted as bank guarantee for the project. KUMPP did not move much in the last nine years as Reliance delayed the project citing non-availability of coal and escalation of costs though the state government allotted 2,400 acres in Krishnapatnam. Power produced from the plant was supposed to be sold in AP, Tamil Nadu, Karnataka, Maharashtra and Telangana. (indiatoday.int)

Gayatri to launch 2.6 GW power complex in AP

February 26, 2016. Gayatri Projects said its arm Gayatri Energy Ventures along with JV partner Sembcorp Industries will launch the 2,640 MW power complex in Nellore district of Andhra Pradesh (AP). Built at a total project cost of \$3 billion (₹ 20,000 crore) the power complex is the largest foreign direct investment-driven project on a single site in the thermal energy sector in India to date, the company claimed. The complex houses two 1,320 MW supercritical coal-fired power plants. Thermal Powertech Corp India Ltd (TPCIL), first power plant was successfully completed and commenced full commercial operation in September 2015, while NCC Power Projects, second plant is expected to be fully operational in 2016, it said. (indiatoday.intoday.in)

BHEL commissions 40 MW hydro project in West Bengal

February 24, 2016. Bharat Heavy Electricals Ltd (BHEL) has commissioned a 40 MW hydro electric generating unit in West Bengal's Darjeeling district. This takes BHEL's total hydel power commissioning to 770 MW in this fiscal, which is also the

highest so far in a single fiscal year since 2005-06. The project is a run-of-the-river greenfield project on the Teesta river and is part of the 4x40 MW Teesta Low Dam Hydro Electric project. The other three units are also in advanced stage of execution. The second unit is expected to be commissioned soon, according to BHEL. It is also executing the 3x40 MW Rammam Stage III hydro electric project of NTPC in West Bengal. The estimated annual energy generation of 720 million units from the Teesta project, being implemented by NHPC, will result in significant reduction of green-house gas emissions in West Bengal. The equipment has come from BHEL units in Bhopal, Jhansi, Rudrapur, Mumbai and Bengaluru and the work is being executed by BHEL's eastern region setup. (www.thehindu.com)

Microsoft founder bats for innovation to prevent coal-fired power in India

February 24, 2016. Microsoft founder Bill Gates called for large-scale innovation so that India opts against the choice of coal-fired power plants to provide electricity to millions of its people. Referring to the millions of Indians without access to electricity, Gates said unfortunately their straightforward path to get there is coal. Gates said that innovation is the answer to most problems, including energy. (indiatoday.intoday.in)

Transmission / Distribution / Trade...

No more unscheduled power cuts after 2 months: CESC

March 1, 2016. Chamundeshwari Electricity Supply Corp (CESC) managing director D Kiran said that the issue of unscheduled power cuts will be resolved in another two months. Kiran said that CESC is chalking out plans to prevent unscheduled power cuts. (timesofindia.indiatimes.com)

DERC orders NDMC to sign PPA

February 27, 2016. Elephant Energy Pvt Ltd (EEPL) has filed a petition with Delhi electricity regulatory commission (DERC) seeking the commission's intervention to direct New Delhi Municipal Council (NDMC) to purchase power from their solid waste management project in fulfilment of renewable purchase obligations. The council has clarified that the power purchase agreement (PPA) has been finalized and is under submission for legal vetting and would be signed as early as possible. DERC directed NDMC to expedite signing of the PPA. EEPL's waste-to-energy hybrid gasification plant that can generate 1.7 MW electricity per hour from 70 tonnes of garbage per day is sitting idle in West Kidwai Nagar from July last year for want of a PPA from the NDMC. With no permission to connect to the power grid the plant uses the gas produced (syngas) for testing and re-testing, and flares up the gas which could well be used in gas engines and generate power. (timesofindia.indiatimes.com)

Adani Enterprise's new arm for coal washing biz

February 27, 2016. Adani Enterprises, the flagship firm of the Adani Group, has incorporated subsidiary Korba Clean Coal Pvt Ltd for carrying on the business of coal washing. Korba Clean Coal Pvt Ltd (KCCPL) is incorporated in India and is yet to commence its business operations, the company said. The company had said that it has extracted and supplied washed coal totalling 3.7 million tonnes (mt) to Rajasthan Rajya Vidyut Utpadan Nigam Ltd (RRVUNL) during the nine months of the current fiscal compared with 2.1 mt in April-December period of the previous fiscal. The company said it is ramping up coal production and is well placed to tap the growth opportunities in domestic coal mining space. (timesofindia.indiatimes.com)

Southern grid to get 4 GW more power in 1 year: Goyal

February 27, 2016. The southern grid will get an additional 4,000 MW of power in the next one year to mitigate the woes of electricity-deficit states, Coal and Power Minister Piyush Goyal said. Power transmission capacity to the southern grid has been improved by 71 percent in the last 18 months, thereby enabling transmission of more power from the north, Goyal said. Earlier, the minister dedicated the 1600 MW super critical mega Damodaram Sanjeevaiah Thermal Power Station of the Andhra Pradesh Power Generation Corporation at Krishnapatnam. By 2020, an additional 18,000 MW of power would be made available to the southern grid, he said. According to Goyal, the Centre was working on a new policy to ensure adequate coal linkage to thermal power projects. The minister said the state could ensure 24x7 power supply within seven months of the current government coming to power in 2014. (www.thenewsminute.com)

Centre's green panel gives nod to ₹ 46.4 bn J&K power project

March 1, 2016. The Centre's green panel has given approval to the ₹ 4,640.88 crore Kiru hydroelectric power project to be developed on Chenab river in Kishtwar district of Jammu and Kashmir (J&K). Last month in a meeting, the Expert Appraisal Committee (EAC) of the Union Environment Ministry had examined the proposal. Based on its recommendations, the ministry will soon take a call on giving the final green nod. The Kiru project will be developed by Chenab Valley Power Projects Pvt Ltd, a joint venture among NHPC, J&K State Power Development Corporation and Power Trading Corporation of India. The project envisages construction of a 123 metre (from river bed level) high concrete gravity dam across river Chenab with four intakes, four pressure shafts, an underground powerhouse of four units of 156 MW each. The construction period of the project is 54 months. While recommending the ministry for grant of Environment Clearance (EC) to this project, the EAC suggested the company should raise the Environment Management Plan (EMP) budget to 3.5%. The EAC has recommended the company to use local people to meet skill requirements of the project. (www.business-standard.com)

Govt distributes over 70 mn LED bulbs under DELP scheme

March 1, 2016. The government has distributed over 7 crore LED bulbs under the Domestic Efficient Lighting Programme (DELP). The scheme, implemented by Energy Efficiency Services Limited (EESL), under the Power Ministry, has been adopted by over 2.3 crore people across 11 states in the country. The government stands committed to achieving the target of changing 77 crore incandescent bulbs in the residential sector to energy efficient LEDs by March 2019. The target will lead to an expected reduction in installed load of 20,000 MW with an annual estimated savings of over 100 million KWh. Currently, the DELP scheme is fully operational in Rajasthan, Maharashtra, Karnataka, Kerala, Uttar Pradesh, Himachal Pradesh, Delhi, Andhra Pradesh, Puducherry, Jharkhand and Uttarakhand. More states and UTs, including Dadra and Nagar Haveli, Gujarat, Odisha, Madhya Pradesh, Haryana and Bihar, will be launching the national programme shortly. (www.india.com)

Tamil Nadu CM launches work on Uppur power plant launches

March 1, 2016. Tamil Nadu Chief Minister (CM) J Jayalalithaa has laid the foundation for coal-based super-critical thermal power project (2 x 800 MW) to be established at Uppur village in Ramanathapuram district, at an estimated cost of ₹ 12,778 crore. Uppur thermal power project would come up in 995.16 acres and is expected to be completed in September 2019 and generate 38.4 million units of power per day. Through this project, Tamil Nadu would get around 12,000 million, in addition to the existing capacity. Recently, Jayalalithaa had laid foundation for a coal-based 800 MW super-critical thermal power project to be established at a cost of ₹ 6,376 crore at Athipattu in Tiruvallur dist. (www.newindianexpress.com)

Budget 2016: Govt ups spend on power PSUs to ₹ 682.56 bn led by NTPC, PGCIL

February 29, 2016. India will invest ₹ 68,256.70 crore on eight public sector power companies in 2016-17 as against ₹ 58,642.89 crore a year ago, according to the Union Budget 2016 document. The biggest allocation for investment has been done for power generator NTPC, followed by transmission company Power Grid Corporation of India Ltd (PGCIL). NTPC's capex for 2016-17 is pegged at ₹ 30000 crore, an increase from ₹ 25,000 crore a year ago. Power Grid Corp of India will spend ₹ 22,500 crore in 2016-17 on capital expenditure, same as last year. The government will invest ₹ 5,000 crore via Power Finance Corp, while no investment was set aside last year. (energy.economictimes.indiatimes.com)

No hike in power tariff due to doubling of coal cess: Goyal

February 29, 2016. The budgetary proposal to double the cess on coal to ₹ 400 per tonne will not lead to hike in power tariffs as discoms will benefit a lot from UDAY scheme, Coal and Power Minister Piyush Goyal said. Under the UDAY scheme meant for the revival of debt ridden discoms, state are taking 75 percent of the debt and issue bonds to pare loans. The discoms will issue state guaranteed bonds for remaining loans to repay the debt. The scheme is expected to help discoms save around ₹ 1.8 lakh crore in the next three years. The cumulative debt of discoms is ₹ 4.37 lakh crore. The budget has proposed to rename Clean Energy Cess levied on coal, lignite and peat as Clean Environment Cess and its incidence has been increased to ₹ 400 per tonne, from ₹ 200 per tonne. The minister said the highest number of 300 villages were electrified and government will electrify 7,000 villages by March end which would be nearly 37 percent of total target of 18,452 villages by May 1, 2018. Goyal expressed hope that all unelectrified villages will be electrified by the end of 2017

and every home will get power by 2018. He said that funding is not a constraint for rural electrification programme as Finance Minister has met all request of Power Ministry. (indiatoday.intoday.int)

Budget 2016: Nuclear sector welcomes ₹ 30 bn yearly allocation

February 29, 2016. Nuclear power generation capacity is built over a period of time and Finance Minister Arun Jaitley's announcement of a ₹ 3,000 crore yearly allocation for the next two decades is certainly a welcome move, Atomic Energy department Secretary Sekhar Basu said. The ₹ 3,000 crore per year over the next 15-20 years stated by Jaitley will be over and above the current annual allocations for the sector, he said, adding that presently the plan is to build 10 reactors with a power generation capacity of 7,700 MW. Basu said the capacity additions will happen through Indian as well as foreign reactors. Basu said 30 percent of the project cost will be equity and the balance will be loans in the case of Indian reactors. (energy.economictimes.indiatimes.com)

Budget 2016: Govt to auction ₹ 900 bn UMPPs before March

February 29, 2016. The government will start auctioning three Ultra Mega Power Projects (UMPPs) before March this year, attracting an investment of ₹ 90,000 crore, budget documents said. Bidding out three UMPPs - Cheyyur, Bedabahal and Bihar UMPP in this financial year would attract an investment of about ₹ 90,000 crore. Deoghar UMPP and Tilaiya UMPP may be bid out in the next financial year after due process is met, attracting investment of ₹ 60,000 crore, the documents said. The government had in last budget announced auctioning five UMPPs under plug-and-play model. (energy.economictimes.indiatimes.com)

Coal Ministry focusses on bringing auctioned mines to production

February 28, 2016. Coal Ministry is taking various steps, including holding regular discussions with the states to resolve issues related to mines amid Prime Minister Narendra Modi asking the ministry to focus strongly on bringing to production auctioned and alloted blocks. The government is targeting twofold jump in coal production to 1.5 billion tonnes by 2020. The representatives of Coal Ministry are making regular visits to the states and holding discussions to resolve problems faced by allottees in development of the mines. The Prime Minister had earlier asked the Coal Ministry that there should be a strong focus to start production from auctioned and alloted mines by tracking transfer of land, mining leases, clearances among other in coordination with state governments. Modi had also asked that the work of three critical rail lines, including Tori Shivpur railway line in Jharkhand, 15 siding projects, linkage rationalisation plan and new washeries should be monitored closely for commissioning as per the schedule. Coal Secretary Anil Swarup said that as many as 15 more coal mines that were auctioned last year would begin production by March 31, taking the number of total producing mines to 23. Swarup had said that eight of the mines have already come in production. The government, last year, auctioned 31 coal mines in three tranches and made an allotment of 42 coal blocks to central or state government companies. However, the government had to annul the process for the fourth round of coal block auction, scheduled in January, due to poor response from bidders in sectors like steel as well as depressed commodity prices and adverse market conditions. Now, the government plans to initiate fourth round of auction as and when market condition improves. (economictimes.indiatimes.com)

UP govt announces mini grid power policy for state

February 28 2016. Uttar Pradesh (UP) government announced the 'mini grid policy' for promoting the establishment of small power generation units through non-conventional sources in rural areas. The policy to be valid for next 10 years, aims to provide power to two crore households without electricity connection for meeting their minimum power requirement like light and fan, mobile recharging and entertainment. The policy has been formulated in view of the steady depletion of the conventional fissile fuel and rise in pollution level due to gas emission by the coal based thermal power plants. Under the mini grid policy small power generating units up to 500 Kilo Watt will be set up. The units under the policy will be of two types, one by the private sector on built, own operate and maintain basis and other with 30 percent subsidy by the state government. The private operator will have to run the unit for 10 years. The private operator will obtain the land for the unit. It will be mandatory for the private operator to provide at least eight hours of power supply to the villages and six hours supply to the commercial category consumers. For eight hours power supply, the operator will be allowed to charge ₹ 60 per month on 50 watt load and ₹ 120 per month on 100 watt load. The operator will be free to sell the surplus power to other consumers. The projects to be set up under mini grid policy will get all the concessions like stamp duty as per the UP Industrial policy 2012 and state solar policy. The objective of the policy is to cover maximum number of rural households with electricity supply. The cost of providing electricity to rural households by constructing

the low tension power distribution line is prohibitive besides it adds to the line losses thus making the venture financially unsustainable. The mini grid policy besides ensuring availability of electricity at affordable cost to the rural households would also help in creating jobs in rural areas and also curb the consumption of the fossil fuel in power generation. (news.webindia123.com)

Poland, India to ink pact on cooperation in coal mining

February 25, 2016. The Polish government is hopeful of signing a pact with India for cooperation in coal mining and related fields to achieve a common goal in the next two months. Polish deputy minister of economic development Radoslaw Domagalski-Labedzki said the subject was discussed in a meeting with India's Coal Secretary Anil Swarup. The minister said that his government possesses a lot of expertise in terms of technology in underground coal mining. Last year, India imported over 10 million tonnes of coal from Poland. Poland has been active in coal mining for over 100 years, but in the last few years it was affected due to subsidised pricing of the commodity in the global market. Besides, Poland is also exploring options to enter the food processing sector in India and a team of at least 20 Polish companies are scheduled to visit the country in March. (www.business-standard.com)

Four coal sector unions call for strike on March 29: Govt

February 25, 2016. Four Central Trade Unions (CTUs) of the coal sector have given notice to go on strike on March 29, Parliament was informed. Coal and Power Minister Piyush Goyal said that the government is in dialogue with the unions on all matters concerning workers. Government had earlier sought the unions' cooperation in combating the "difficult situation" the sector was passing through due to fall in global commodity prices. The CTUs in a meeting with Goyal had assured the government of full cooperation in combating the adverse situation. (www.dnaindia.com)

CIL to increase coal production to 1k mt in next 4 yrs: Goyal

February 25, 2016. The government is working to increase coal production by Coal India Ltd (CIL) to 1,000 million tonnes (mt) in the next four years through the use of latest environment-friendly technology, Lok Sabha was informed. The estimated production planned by Coal India Ltd (CIL) during 2019-20 is 908.10 million tonnes and there are plans to raise it up to 1,000 million tonnes, Coal and Power Minister Piyush Goyal said. The roadmap prepared by the CIL to increase the production has been put in public domain, he said. The minister said technology such as underground gasification of coal to ensure a cleaner environment and enhanced coal washing is being considered. He said the underground gasified coal can be used to fuel gas-based plants. He also said there was no power shortage in the country and all thermal plants have stocks of up to 25 days. He claimed that earlier the plants had 'zero day' stocks and the coal used to be sent directly to the plants to fuel them. Goyal said the CIL had stocks of 54 million tonnes, which have now been brought down to 45 million tonnes, as "good practice calls for not having excess reserves". He said, about 10,180 MW capacity based on super-critical technology can be installed after replacement of old units of 5,860 MW. The total estimated fund requirement is around ₹ 70,000 crore. (www.dnaindia.com)

Power Ministry may issue tax-free bonds to fund hydropower plants

February 24, 2016. The government is considering issuing tax-free bonds to provide long-term finance to hydropower plants, power secretary PK Pujari said. Pujari said the power ministry is working on a policy to revive the laggard hydropower sector. The ministry is also considering altering bid documents of new hydropower plants to make provisions for possible geological surprises and required actions to cut cost and time overruns. The ministry is also mulling to bring big hydropower plants under the ambit of renewable energy. At present, small hydropower plants with capacity of less than 25 MW are considered renewable projects. The share of hydropower has shrunk to just 15 percent of the country's total installed capacity though India ranks fifth in the world in hydroelectric potential with an estimated potential of 148 GW. Issues like long construction period, lack of transport infrastructure, geological risks, land acquisition and environmental and religious concerns have slowed hydropower projects including 50,000 MW being allocated to private companies in north and northeast India. (economictimes.indiatimes.com)

UDAY scheme solution to CIL surplus: Govt

February 24, 2016. The UDAY scheme for reviving debt-ridden power distribution utilities is one of the solutions to tackle the surplus production of Coal India Ltd (CIL) which stands at 40 million tonnes, Coal Secretary Anil Swarup said. The UDAY scheme aims to restructure the consolidated debt, in excess of ₹ 4.3 lakh crore debt, of state distribution companies. Import is down 16 percent year-on-year and saving could be between ₹ 25,000 crore and ₹ 30,000 crore for the current fiscal year.

Currently, CIL is faced with a pit-head stock in excess of 40 million tonnes mainly due to lower offtake by power companies. Asked about pending coal linkage auction policy, Swarup said it was expected in a month. He emphasised on cost efficiency as he does not foresee any price recovery in near term due to surplus scenario. A plan has been drawn for 15 coal washeries by 2017 to supply quality coal to consumers, he said. (profit.ndtv.com)

Reliance Sasan UMPP to get compensation for water charges & coal cess

February 24, 2016. The Central Electricity Regulatory Commission (CERC) allowed compensation for escalated water charges and clean energy cess on coal to Reliance's Power 4,000 MW Ultra Mega Power Project (UMPP) in Sasan, Madhya Pradesh (MP). The change in input prices were ruled under "change of law" and the regulator held that the power generator needs to be paid for same. The regulator asked the six states - MP, UP, Uttarakhand, Rajasthan, Haryana and Punjab — which procure power from UMPP to compensate the increased input cost of water, royalty of coal and clean energy cess on coal. RPower in its petition mentioned the state government of Madhya Pradesh revised water charges from ₹ 4 in 2010 to ₹ 5.50 currently. Reliance also submitted that the impact of the imposition of clean energy cess on coal till 28.2.2015 is ₹ 81.89 crore. As regards excise duty on coal, the impact till same period is ₹ 61.36 crore. (www.business-standard.com)

[INTERNATIONAL: OIL & GAS]

Upstream.....

Genel to take about \$1 bn impairment on Iraqi Kurdistan field

February 29, 2016. Genel Energy Plc said it expected to book about \$1 billion in impairment to the 2015 value of its Taq Taq oilfield in Iraqi Kurdistan, citing reduced estimate for recoverable reserves there and falling oil prices. It estimated that Taq Taq had proven and probable reserves of 356 million barrels of oil (mmbbls) as of Dec. 31, down from its earlier assumption of 683 million barrels in June 30, 2011. By the end of last year, Taq Taq field had already produced 184 mmbbls gross. Genel said that it would resume drilling work at Taq Taq in the coming weeks to ramp up production, despite a roughly 40 percent fall in oil prices over the past year to around \$30 a barrel. The move would have marked the first time in more than a year that Genel has drilled in the region to increase output from its fields after the Kurdistan Regional Government struggled to pay producers for oil exports. Gross production at the field is expected to average about 80,000 barrels of oil per day (bopd) this year, the company said, sticking to its full-year guidance of 60,000-70,000 bopd. (www.reuters.com)

San Leon abandons 6 gas-exploration permit requests in Spain

February 29, 2016. San Leon Energy Plc, the Irish exploration company that's searched for shale gas across Europe, dropped six of its license applications in Spain. The company's Frontera Energy unit asked for the permit requests to be canceled Dec. 1, according to Spanish government, which gave no reason for the move. Spain's government has changed laws and fought court cases to open the way for shale exploration with hydraulic fracturing, though it has yet to authorize any project that uses the production method. The extraction technique, known as fracking, blasts rock with a mixture of sand, water and chemicals to release oil and gas. Frontera requested the permits in February and March of 2011. By abandoning the applications, the company will get its financial guarantees returned. (www.bloomberg.com)

BP says 2015 oil output in Azeri projects down to 31.3 mt

February 29, 2016. Oil output at BP-led oilfields in Azerbaijan in 2015 edged down to 31.3 million tonnes (mt) from 31.5 million tonnes the previous year, BP-Azerbaijan said. Falling oil production at the Azeri-Chirag-Guneshli (ACG) oilfields, which account for most of Azerbaijan's output, has raised concern in the former Soviet republic. (www.reuters.com)

US oil explorers idle rigs as world looks for shale cuts

February 26, 2016. Explorers parked more drilling rigs in United States (US) oilfields as the rest of the world looks to shale producers to arrest the worst crude downturn in 30 years with more cutbacks. Rigs targeting oil in the U.S. fell by another 13 to 400, after more than 100 were idled since the start of the year, Baker Hughes Inc. said. The report marks the 10th straight week of declines in the number of working rigs. Natural gas rigs gained by 1 to 102, bringing the total down by 12 to 502. The Eagle Ford Shale in South Texas idled 8 rigs, bringing the total working in the region to 41. One rig was idled in the Permian Basin. Rigcounts in the D-J Niobrara and Williston Basin were both unchanged. After falling 31 percent

in 2015, crude is down another 8 percent this year on speculation a worldwide surplus will be prolonged because of rising U.S. stockpiles that have swelled to the highest level in more than eight decades. Global producers are in discussions about a site for a meeting next month on a possible production freeze, Venezuelan Oil Minister Eulogio Del Pino said. Production fell by 33,000 barrels a day to 9.14 million, the lowest since October. (www.bloomberg.com)

CNOOC invites bids for 18 offshore exploration blocks in China

February 26, 2016. China National Offshore Oil Corp (CNOOC) invited foreign companies to submit bids for offshore oil and gas exploration blocks in the country, the firm said. The Chinese state-owned company is offering 18 blocks in the tender, spreading over an area of 20,281 square miles (52,257 square kilometers) offshore China. Interested companies should approach CNOOC to schedule a visit to the Data Room in Tianjin, Shanghai, Guangzhou and Zhangjiang, where they can purchase relevant information of the offshore blocks offered in the tender from Feb. 24 to June 30. The closing date for bid submissions is Oct. 31. (www.rigzone.com)

Leviathan partners raise annual natural gas production forecast

February 25, 2016. The partners developing Israel's massive Leviathan offshore natural gas field increased their annual production forecast and said they expect to bring the project online by the end of 2019. The group led by Texas-based Noble Energy and Israeli conglomerate Delek Group presented a new development plan that calls for 21 billion cubic meters (bcm) of gas production each year, up from 16 bcm in their initial plan. They also lowered the estimated cost of the project to \$5-\$6 billion from a previous \$6-\$7 billion. Leviathan was discovered in 2010 in the eastern Mediterranean and has estimated reserves of 622 bcm, making it one of the world's largest finds of the past decade. But development has been held up due to regulatory uncertainty in Israel. The development plan presented includes drilling eight wells to be connected by a subsea pipeline to an offshore platform, producing a total of 21 bcm a year. One exit point capable of handling up to 12 bcm a year will be for Israel, as well as bringing supplies to neighbouring markets in the Palestinian Authority, Jordan and Egypt. A second exit point to handle up to 12 bcm is solely for export. (www.reuters.com)

Eni to develop Coral gas discovery offshore Mozambique

February 25, 2016. The Government of Mozambique has approved Italian oil and gas company Eni's plan to develop the Coral discovery located in the Area 4 permit. With the approval in place, the firm will commence with first phase of development of 5 trillion cubic feet of gas in the Coral discovery located in water more than 2000 m deep and approximately 80 km offshore of the Palma bay in the northern province of Cabo Delgado. Eni said that the discovery proved the existence of a high quality field of Eocenic age with excellent productivity. According to the company's estimates, the discovery contains around 16 trillion cubic feet of gas in place, wholly located in Area 4. Eni and its partners are also planning to develop gas reserve base of the Mamba discovery. (explorationanddevelopment.energy-business-review.com)

Total starts production from Vega Pleyade, Argentina

February 25, 2016. Total has commenced production from the offshore Vega Pleyade gas and condensate field in the Tierra del Fuego region of Argentina. The Vega Pleyade development consists of a wellhead platform in a water depth of 164 feet, which is tied back to the Total-operated Rio Cullen and Cañadon Alfa onshore treatment facilities. Operated by Total with a 37.5 percent interest, the project will have a production capacity of 10 million cubic meters of gas per day (70,000 barrels of oil equivalent per day). (www.rigzone.com)

Warburg Pincus to invest up to \$500 mn in RimRock Oil & Gas

February 24, 2016. Private equity firm Warburg Pincus agreed to invest as much as \$500 million in an oil and gas producer after commodities prices plummeted. Warburg Pincus will give RimRock Oil & Gas a line of equity to help the startup company acquire and develop energy assets in North America, the companies said. The money is coming from New York-based Warburg Pincus's \$12 billion private equity fund and its \$4 billion energy fund. While private equity firms have collected more than \$20 billion for energy deals in the past two years, the money has largely remained on the sidelines, in part because oil producers have been unwilling to sell. That may quickly change, according to Deloitte LLP, which said more than one-third of listed producers worldwide are at high risk of bankruptcy, as their collective debt surged to about \$150 billion and cash flows dwindled. (www.bloomberg.com)

Jura announces potential Badin IV South gas discovery in Pakistan

February 24, 2016. Jura Energy Corp announced a potential gas discovery at the Aminah-1 exploration well in the Badin IV South block in Pakistan. Jura holds a 27.5 percent working interest in the Badin IV South block, which is operated by Petroleum Exploration (Pvt) Ltd (PEL). At the present time, PEL has not provided drilling depth, testing results or other status information with regard to the drilling of Aminah-1 directly to Jura, and Jura has not independently verified the discovery. From time to time, Jura has been involved in various legal or administrative proceedings involving PEL. At present, Jura and PEL are in dispute with regard to, among other things, a past cash call for the Badin IV South block pursuant to which PEL has commenced proceedings with the Government of Pakistan to attempt the forfeiture of Jura's working interest in the Badin IV South block. (www.rigzone.com)

Downstream.....

Oil refineries' booming profits set to slow this year

February 25, 2016. Oil refiners are set to enjoy another year of robust profits as feedstock prices remain low, but new plants and slower global growth mean 2016 will not be a boom year. The 70 percent drop in crude oil prices since mid-2014 sparked a worldwide boom in demand last year, as drivers in the United States, China and India bought more cars and took more road trips. Refineries operated at full throttle throughout 2015 and booked the strongest profits in years as demand surged 1.8 million barrels per day (bpd), or more than 2 percent from the previous year. This year, the International Energy Agency (IEA) has said it expects demand growth of 1.2 million bpd, down from last year's unusually high rate, as the global economy slows and new car purchases decline. State-of-the-art refineries set to start operating in the Middle East and Asia will increase the supply of refined products such as jet fuel, diesel and gasoline by around 1.3 million bpd to 82.4 million bpd. Horace Hobbs, chief economist for Phillips 66, the fourth-largest U.S. refiner, said that the company does not expect 2016 margins to match 2015 levels. He said the ability to export refined products drives refining margins more than low crude prices. When output exceeds domestic demand, refiners can still run full tilt because they can export to international markets that need their excess. Phillips' U.S. Gulf Coast plants are focused on accessing those markets, including Latin America, Africa and Europe. (www.reuters.com)

Transportation / Trade......

Oil prices waver as China factory slump cancels out output dip

March 1, 2016. Oil prices were torn between slight gains and losses as falling United States and Organization of the Petroleum Exporting Countries (OPEC) production tightened an oversupplied market but another slump in China's manufacturing sector stirred fears of slowing demand growth preventing markets from rising. Traders said that on the price supporting side were shifts in oil supply and demand fundamentals, especially dipping production in the United States and the OPEC. United States government data showed crude output last December fell for a third straight month by 43,000 barrels per day (bpd) to 9.26 million bpd, its lowest in a year. Although average annual 2015 crude production of 9.43 million bpd was still 720,000 bpd above the previous year. Supply from OPEC has also declined, falling by 280,000 bpd in February to 32.37 million bpd, according to a survey. However, weak economic data out of China and the prospect of slowing oil demand growth weighed on oil. China's factories shed jobs at the fastest rate in seven years in February as activity shrank to five-month lows, a survey showed, raising doubts about the government's ability to reduce industry overcapacity this year without triggering a sharp jump in unemployment. At the same time, discussions among major oil producers, including Saudi Arabia and Russia, agreeing to a production freeze are unlikely to reduce a global overhang in supply of well of over 1 million bpd, other analysts said. (www.reuters.com)

Petrobras gets \$10 bn Chinese loan in oil supply deal

February 27, 2016. Petroleo Brasileiro SA (Petrobras) secured a \$10 billion loan from the China Development Bank as the beleaguered state-owned oil producer endures the worst crude market in a generation and faces more than double that amount in maturities over the next two years. The lifeline is part of a deal to supply crude to the Asian country, Rio de Janeiro-based Petrobras said. The amount of crude that will be supplied wasn't disclosed. China has invested in oil-rich nations to ensure supplies to the world's biggest crude market after the U.S. Similar deals have helped Venezuela fund its ballooning debt. Petrobras has been mired in Brazil's worst-ever corruption scandal just as the Latin American nation goes through a recession, reducing domestic demand, and oil prices are 70 percent lower than in mid-2014. The loan stems

from accords signed between Brazil and China last year, Petrobras said. This is the latest major deal between Petrobras and China in seven years. In 2009, a \$10 billion arrangement with China included a commitment to export as many as 150,000 barrels a day of oil in the first year and 200,000 barrels a day over the subsequent nine years. (www.bloomberg.com)

Turkey starts repairs on Iraqi Kurdish oil pipeline as violence flares

February 27, 2016. Turkey has begun work to repair a pipeline taking crude oil from northern Iraq to the Mediterranean through its restive southeast and aims to restore flows soon, the Turkish energy ministry said. The pipeline, which has been repeatedly sabotaged in recent months, normally carries some 600,000 barrels per day (bpd) of crude from Iraq's autonomous Kurdistan region and the disputed Kirkuk oil fields to the port of Ceyhan for export. The ministry said the pipeline was most recently suspended due to temporary security measures. The outage, one of the longest in the past two years, is a major blow to Iraq's autonomous Kurdistan region which depends on revenue from oil exports via the pipeline as it fights with Islamic State and is struggling to avert economic collapse amid slumping energy prices. The ministry said security forces had detonated explosives set at several points along the pipeline. (www.reuters.com)

Azerbaijan says construction of TAP pipeline to begin in March

February 26, 2016. Azeri Energy Minister Natig Aliyev said that construction work on the Trans Adriatic Pipeline (TAP) would begin in March. The TAP project aims to transport gas from Azerbaijan's Shah Deniz II field in the Caspian Sea, one of the world's largest gas fields, by the end of the decade. TAP's shareholders are BP, Azeri state company SOCAR, Snam, Fluxys, Enagas and Axpo. (uk.reuters.com)

Russia's Gazprom cuts gas supplies to Turkey by 10 percent

February 25, 2016. Russian energy giant Gazprom has reduced natural gas supplies to private sector companies in Turkey by 10 percent due to a price dispute, Turkey's energy ministry said. The cut came after Turkish companies refused to pay a fresh bill sent by Gazprom with higher prices after an initial deal between Ankara and Moscow envisaging a 10.25 percent reduction in prices was cancelled. Six private Turkish companies buy a total of 10 billion cubic meters of natural gas from Russia annually. Turkey is dependent on Russia for more than half of its natural gas imports but the two countries have been at loggerheads since November when Ankara downed a Russian warplane along the Turkey-Syria border saying it violated its air space. Turkey said it had struck a deal giving it a 10.25 percent price discount on gas from Gazprom, but a final signing was delayed, prompting state pipeline operator Botas to appeal to the International Chamber of Commerce (ICC). Russia is Turkey's largest gas supplier with sales of 28-30 billion cubic metres annually worth around \$6.5 billion. Turkey imports 60 percent of its gas and 35 percent of its oil from Russia. (www.reuters.com)

Iran seeks oil barter as European buyers face banking hurdles

February 25, 2016. Iran is offering to swap exports of crude oil for imports of refined fuel as some European customers struggle to find banks to process payments, a sign the Middle Eastern nation is still having difficulty regaining markets since the removal of sanctions. The National Iranian Oil Co. (NIOC) is resorting to barter because financial restrictions still impede trade. Hellenic Petroleum SA has struggled to secure deliveries because banks wouldn't process payments. Iran is seeking to regain lost European markets and boost exports to Asia after sanctions were removed last month upon completion of an agreement limiting its nuclear program. It loaded its first cargo of oil to Europe since 2012 this month onto a tanker chartered to French oil company Total SA. The country plans to increase exports by 1 million barrels a day this year, dismissing the possibility of joining an output freeze agreed by major producers including Saudi Arabia. Barter deals avoid the need to access bank finance for as long as many lenders remain unwilling to issue letters of credit for Iranlinked trades, the NIOC said. The company is asking for at least partial cash payment for most refined-product trades and accepting transactions in Euros and other currencies. It is offering products such as fuel oil in exchange for imports of gasoline and is also willing to swap crude for fuel. (www.bloomberg.com)

US exports first shale gas as LNG tanker sails from Sabine Pass terminal

February 24, 2016. The United States (US) has exported its first liquefied natural gas (LNG) cargo from the lower 48 states, after a tanker set sail from Cheniere Energy's Sabine Pass export terminal in Louisiana. Expected to become an importer of LNG just a decade ago, the shale gas revolution in the United States unlocked cheap, abundant gas supplies, allowing the country to become an exporter instead. The first United States exports come just days before production begins at the Chevron Corp-led Gorgon LNG project in Australia, the world's most expensive LNG terminal at \$54 billion, and will add to a wave of supply at a time when demand is faltering in major consuming countries and prices plummeting in line with oil.

The first cargo of about 3 billion cubic feet of gas will go to Petrobras in Brazil, Cheniere said. Cheniere Energy has six LNG vessels under charter, including the Asia Vision. The Energy Atlantic, another tanker chartered by Cheniere, has been waiting in the Gulf of Mexico since January and is also expected to transport LNG from Sabine Pass. (www.reuters.com)

Policy / Performance.....

Russia's Gazprom aims for more gas auctions in Europe this year

March 1, 2016. Russian gas giant Gazprom intends to hold more gas auctions this year after planned sales to the Baltic states, Elena Burmistrova, the head of the company's exporting arm, said. Gazprom held a trial gas auction in September, selling over 1 billion cubic metres (bcm) for delivery to north-western Europe from 3.2 bcm on offer. It called the event, which was organized against a backdrop of tougher competition and regulations on the European market, a success. Gazprom has said it will offer 560 million cubic metres (mcm) to Lithuania and Latvia in an auction to be held in mid-March. Litgas, the gas trading arm of Lithuania's state owned top energy group Lietuvos Energija, forecasts that Lithuania will consume 1.8 bcm of gas this year, down from about 2.2 bcm in 2015. Russian gas supplies have become increasingly politicized after Russia's annexation of Ukraine's Crimea in 2014 and following a separatist conflict in eastern Ukraine. Lithuania, Latvia and Estonia have all been staunch proponents of cutting energy purchases from Moscow, their former Soviet overlord. Lithuania will this year import more gas from Norway than from former sole supplier Russia after developing infrastructure to support liquefied natural gas (LNG) imports. The country is a small market for Gazprom, with its consumption accounting for just over 1 percent of Russia's total gas exports to Europe. Russian gas buyers in Europe, where Gazprom covers a third of gas needs, have increased pressure on Moscow, asking it to agree to more spot-pricing in gas contracts, which are predominately long-term oil-indexed deals considered to be non-transparent and expensive. (www.reuters.com)

Pakistani PM cuts petrol price by ₹ 8.4 per litre

March 1, 2016. Pakistani Prime Minister (PM) Muhammad Nawaz Sharif announced a major reduction in the prices of petroleum products, bringing huge relief to the masses. The price of petrol was cut by ₹ 8.48 per litre, high speed diesel by ₹ 4.67, light diesel oil by ₹ 1.97 and high octane by ₹ 1.97. After reduction, petrol will sell at ₹ 62.77 per litre and high speed diesel (HSD) at ₹ 71.12 per litre. The prime minister also announced to maintain the price of kerosene by rejecting a proposal of the Oil and Gas Regulatory Authority to increase the same by ₹ 1.66 per litre. The PM has also directed transporters to reduce fares so that the common man gets the benefit. The authority recommended up to a 12 percent reduction in the prices of all petroleum products except kerosene for March. The authority said oil prices had registered a substantial reduction on the international market in February and the benefit of this reduction in prices must pass on to consumers. The PM said Pakistan was the only country in the region that had passed the cut in petroleum prices on to masses whenever these were reduced on the international market. He said no country in the region except Pakistan had reduced the prices of petroleum products to such a great extent. The PM said he also desired to reduce the burden of taxes on the masses by slashing the current rates of taxes, duties, excise duty and sales tax. Similarly, the PM said besides a ₹ 3 per unit cut in the price of electricity the government had also succeeded in reducing load shedding during the last over two and a half years. In Punjab, gas stations are using imported LNG while its prices are already deregulated at all retail outlets. This low priced gas will also be available at the stations in Islamabad using RLNG. The government had signed a \$16 billion long-term (15 year) agreement with Qatar under which two agreements were made with Qatar Gas and another private sector company Gunvor. Under spot purchase, so far 20 ships have reached Pakistan. Four other ships are in the pipeline in which three are from Qatar Gas and one from Gunvor. With the new arrival, the prices will further go down in the months to come. All Pakistan CNG Association (APCNGA) said the price of CNG would be slashed by ₹ 6 to ₹ 7 per kg at the CNG stations being run on RLNG which will reduce the oil import bill and pollution while providing jobs to millions. CNG in Punjab would be 30 percent cheaper than petrol making it attractive for motorists and transporters which will also reduce fares of public transport, providing relief to commuters. This will also reduce gas shortages in the country soon. (www.thenews.com.pk)

Saudi says to work with oil producers to limit market volatility

February 29, 2016. Saudi Arabia will continue to work with all main oil producers to limit market volatility and is committed to meeting a big part of global oil demand based on commercial considerations, its cabinet said. The cabinet said that

Saudi Arabia will continue to invest in its energy sector to keep its oil production capacity to help meet any extra demand or to deal with any disruption in global supply. (www.reuters.com)

Oil to average just over \$40 a barrel in 2016

February 29, 2016. Oil prices will average just over \$40 a barrel this year due to subdued demand and the likelihood a tentative agreement by leading producers to freeze output will do little to drain a supply glut, a poll showed. The price, which has fallen by 45 percent in the last 12 months, is unlikely to recover much beyond its current levels around \$34 a barrel until the second half of the year, when output from producers outside Organization of the Petroleum Exporting Countries (OPEC) is expected to decline. The survey of 30 economists and analysts forecast benchmark Brent crude LCOc1 will average \$40.10 a barrel, down \$2.40 from last month's poll. Brent crude, which averaged about \$54 a barrel in 2015, has averaged \$32.57 so far this year. This is the ninth successive monthly Reuters poll in which analysts have lowered their price forecasts. Russia and OPEC members Saudi Arabia, Qatar and Venezuela have agreed to work on a global deal to freeze oil output at January levels if other producers follow suit in a bid to tackle the global crude glut and support prices. But Iran is planning to ramp up its output following the end of Western sanctions and has said the proposal is "laughable". Iraq has also said it will boost production. Analysts are also skeptical that freezing production near record levels will support the market. Oil prices have fallen 70 percent since mid-2014 due to surplus crude piling up and a decision by the OPEC in late 2014 to refrain from cutting output to shore up prices, as it had done for decades. The analysts polled believed supply and demand would not be balanced until late 2016, though the gap between the two is expected to narrow compared with last year. Global demand growth would likely remain subdued in the medium term due to a slowing Chinese economy and a decline in consumption in OECD countries on improving energy efficiencies and a shift towards cleaner fuels, the analysts said. (www.reuters.com)

Oil prices 'totally unacceptable', Nigerian President tells Qatar's ruler

February 28, 2016. The Organization of the Petroleum Exporting Countries (OPEC) cartel needs to take action to stabilize the oil market because crude prices have fallen to "totally unacceptable" levels, Nigerian President Muhammadu Buhari said. Nigeria, Africa's biggest oil producer which earns around 90 percent of its foreign exchange earnings from crude oil exports, has been hit hard by the erosion of vital revenues caused by the global slump in oil prices which has also hammered its currency. (www.reuters.com)

China's natural gas consumption up nearly 18 percent in January: NDRC

February 26, 2016. China's natural gas consumption rose 17.6 percent in January from the same month last year, reaching 22.3 billion cubic metres (bcm), the National Development and Reform Commission (NDRC) said. Production was up 4.1 percent on the year to 13.1 bcm, the NDRC said. Refinery runs of crude oil fell 1.8 percent on the year in January to 38.66 million tonnes, or 9.1 million barrels per day (bpd). Crude output dropped 2.1 percent to 17.69 million tonnes, or 4.17 million bpd. The country's National Bureau of Statistics does not release standalone production figures for January. Its production figures generally differ from those released by the NDRC. (af.reuters.com)

EDC provides C\$750 mn in emergency funds to O&G firms

February 26, 2016. Canada's trade financing bank will provide as much as C\$750 million (\$553 million) in emergency loans to small- and medium-sized oil and gas companies, a rare move to assist an industry struggling through a period of low energy prices. Export Development Canada (EDC) is providing the loans for companies to boost productivity, find new markets and improve environmental performance. The new funding, most of which will probably be disbursed this year, is an extension of a C\$400 million EDC program rolled out last year to the same industry. (www.bloomberg.com)

Norway oil firms deepen cuts to 2016 investment plans

February 25, 2016. Norway's oil companies have deepened cuts to their 2016 investment plans, the latest survey by Statistics Norway showed, weakening the crown and heightening expectations of a rate cut by the central bank next month. Norway's leading industry has hit the brakes due to a 70-percent drop in the price of Brent crude since mid-2014 that has brought the Norwegian economy to a standstill. The country's oil companies now plan to invest 163.9 billion crowns (\$18.89 billion) this year, against the 171 billion crowns they expected to invest when surveyed in November by Statistics Norway. The key policy rate is currently 0.75 percent. The next rate decision will be announced on March 17. The oil sector is

planning to slash investments by 13 percent in 2016 against 2015, while overall investments by Norwegian firms were expected to fall by nine percent, the survey showed. Of particular concern to Norwegian authorities will be cuts to investment in exploration for oil and gas. Companies are planning to spend 16 billion crowns in exploration this year, down from the 21.5 billion they had expected in November. That would mark a 44-percent drop on the 28.7 billion crowns they spent in 2015. (www.reuters.com)

Russia says proposed oil output freeze should last at least a year

February 25, 2016. A potential deal between leading oil producers to freeze output should last for at least a year, Russian Energy Minister Alexander Novak said. Russia and OPEC members Saudi Arabia, Qatar and Venezuela agreed to work on a global deal to freeze oil output at January levels if other producers follow suit in a bid to tackle the global crude glut and support prices. Novak said it was unclear whether the proposed output freeze would be just a verbal agreement or a signed document. Moscow hopes that the oil market will balance faster if Russia and other countries do not increase output, Novak said. He said oil ministers from OPEC and non-OPEC countries were planning to meet in mid-March and that Russia would attend the meeting if it took place. (www.reuters.com)

Bulgaria investigates possible fixing of fuel prices

February 25, 2016. Bulgaria's anti-monopoly watchdog has launched an investigation into the country's only oil refinery and seven fuel retailers over possible cartel agreements to fix prices of petrol and diesel fuels, it said. The Commission for Protection of Competition said it had started investigating the Bulgarian units of Royal Dutch Shell, OMV, Hellenic Petrolleum, Nis Petrol, Lukoil, Rompetrol and Bulgarian Petrol. It has also launched a probe into Lukoil Neftochim Burgas oil refinery for possible breaches of competition rules while selling its fuels on the local market. It also said the prices at which the country's oil refinery Neftochim Burgas sold its fuels for automobiles on the local market were higher than prices for exports, with all other conditions being equal. (in.reuters.com)

Mexico says oil prices won't recover until second half of 2017

February 25, 2016. Oil prices won't recover until the second half of next year at the earliest, Mexican Energy Minister Pedro Joaquin Coldwell said, joining a chorus of industry leaders and officials predicting a long period of low prices. The forecast suggests more pain for the energy industry and oil-rich countries as global benchmark Brent crude trades near its lowest in 12 years. Mexico, which is not an OPEC member, is willing to participate in a meeting with OPEC and non-OPEC producers to discuss a potential output freeze, Coldwell said. Saudi Oil Minister Ali al-Naimi said that the accord to freeze production marked "the beginning of a process" that will continue with further discussions among producing countries in March. Venezuela said that Saudi Arabia, Russia and other leading oil producers were discussing meeting next month on the market. Mexico, currently the world's 10th-largest producer according to the U.S. Energy Information Administration, was the architect of a series of oil production cuts in 1998 and 1999 involving OPEC and several non-OPEC nations that revived prices. The market is oversupplied by about 2 million barrels a day, Coldwell said, equivalent to the consumption of France. Mexico isn't likely to cut output at this time, Coldwell said. Al-Naimi said that Saudi Arabia, the world's largest oil exporter, won't cut output. (www.bloomberg.com)

[INTERNATIONAL: POWER]

Generation.....

Japan's Marubeni eyes \$3.5 bn power plant deal in Egypt

March 1, 2016. Japanese trading house Marubeni may help build Egypt's largest power plant, a project equivalent to a tenth of the country's generating capacity and expected to cost more than 400 billion yen (\$3.54 billion). Prime Minister Shinzo Abe and visiting President Abdel-Fattah el-Sissi agreed on Japanese corporate involvement in some 2 trillion yen worth of endeavors in Egypt. The two leaders issued a joint statement in which Japan offered roughly 41.1 billion yen in official development assistance for Egyptian electric power infrastructure. Abe's government has sought to promote infrastructure exports and is looking to build on its success in India, which has chosen Japanese bullet train technology for a high-speed-rail project. Tokyo sees Egypt -- the Middle East's most populous nation, home to 90 million people -- as a promising market whose economic development can contribute to regional stability. Marubeni and Egypt's state-run

electric utility will sign a memorandum of understanding, the final day of el-Sissi's visit to Japan, on a feasibility study for the proposed 4 million kilowatt coal-fired power station. An assessment of the project's financial viability and a decision on whether to begin construction are to be made within a year's time. (asia.nikkei.com)

Pakistan, China to build 350 MW coal power plant in Karachi

February 29, 2016. Pakistan and China have signed a contract to build a coal-fired power plant near Bin Qasim port in Karachi. The work on the plant having a capacity of 350 MW will start in July which will be completed in 31 months. The agreement was signed between China's state-owned Harbin Electric Corporation and Pakistan Siddiqsons Energy. The country aims to add 8,100 MW through coal to its system – as much as 40% of its existing generation capacity. (tribune.com.pk)

Engie to divest 13 GW of power generation assets

February 26, 2016. French gas and power utility Engie has signed agreements to divest its interests in 13 GW of power generation capacity. The firm signed an agreement with a joint venture of Dynegy and private equity firm Energy Capital Partners to sell its 8,731 MW of US power plants for \$3.3 bn. The power plants are located in ERCOT, PJM, ISO-New England and other regulated power markets. Dynegy with have 65% stake in the joint venture, known as Atlas Power, while the remaining stake is held by Energy Capital. Scheduled to be completed in the fourth quarter 2016, the transaction is subject to customary closing conditions including approval from the Federal Energy Regulatory Commission, Public Utility Commission of Texas, and expiration of Hart-Scott-Rodino waiting periods. Dynegy expects the joint venture to further diversify its footprint and creates a combined 35,000 MW portfolio. (fossilfuel.energy-business-review.com)

Russian lends \$1.3 bn to Cuba to build four 200 MW power plants

February 25, 2016. Russia has granted Cuba a US\$1.3 bn loan to develop four 200 MW thermal power plants, that should be developed by Russian company Inter RAO and Energoimport (Cuba) between 2022 and 2024. The project was announced in October 2015. Three power plants will be built in East Havana and one in Mariel and will improve power supply in peak hours. (www.enerdata.net)

Transmission / Distribution / Trade...

EIB lends £500 mn to upgrade power grids in England

February 29, 2016. The European Investment Bank (EIB) has approved a £500 mn (€630 mn) loan to support UK Power Networks' £1.2bn (€1.5 bn) of network investment to improve critical energy infrastructure across London, the East of England and South East England over the next seven years. This loan facility will add to the European Investment Bank's existing commitment of £350 mn. UK Power Networks, which distributes 27% of the UK's electricity, owns and operates 130,000 substations and 170,000 km of overhead lines and underground cables. The EIB loan will help ensure safe and reliable power supplies and provide additional capacity for future demand. UK Power Networks makes approximately 100,000 new connections to the network every year. (www.enerdata.net)

Policy / Performance.....

Japan's NRA approves Takahama 1 and 2 safety standards

March 1, 2016. The Japanese nuclear watchdog, the Nuclear Regulation Authority (NRA), has announced that the first two units of the Takahama nuclear power plant meet the safety standards introduced in July 2013 following the March 2011 accident at the Fukushima Daiichi plant. This decision will formally be approved after hearings by the Japan Atomic Energy Commission and the Ministry of Economy, Trade and Industry. Takahama-1 and 2 are two 780 MW pressurized water reactors that were commissioned in 1974 and 1975. Units 3 and 4 of the plant were allowed by the city of Takahama to resume operations in December 2015. Takahama-3 restarted in late January 2016 and achieved 100% output on 4 February 2016. Takahama-4 is ready to be restarted and to resume full operation in late March 2016. (www.enerdata.net)

Duke gains approval for \$1 bn plan to convert coal plant

March 1, 2016. Duke Energy Corp, the largest U.S. utility owner, won approval from North Carolina regulators to spend about \$1 billion to convert a coal-fired power generator into one that burns natural gas. The North Carolina Utilities

Commission signed off on Duke's proposal to build two 280 MW gas-fired units at the Asheville station in the western part of the state that currently houses a 376 MW coal facility, the Charlotte, North Carolina-based company said. The company said the project will result in less pollution with the coal plant being retired by 2020. Duke has been under pressure in the state to clean up its power generators after its 2014 coal ash spill into the Dan River. Opponents of Duke's conversion plan have said the new gas-fired units aren't necessary and called for the coal plant to be shut immediately. (www.bloomberg.com)

DEWA launches smart power plant

February 29, 2016. Dubai Electricity and Water Authority (Dewa) has launched the smart power plant. The launch aims to develop DEWA's smart operations and achieve its vision to become a sustainable world-class utility, in line with making Dubai the smartest city in the world. The data gathered by power plants can be immediately calculated by the smart power plant in real time, showing immediate results for major performance indicators such as production, and performance. The system automatically issues technical, and administrative reports, and sends immediate notifications regarding important events via email or SMS. (www.constructionweekonline.com)

Chile plans power interconnection to Peru

February 29, 2016. Chile is working on a 70 km long power interconnection project that would link Arica in Chile to Tacna in Peru. The technical feasibility study has been completed and would enable Chile to benefit from Peru's current oversupply (excess production expected at least until 2025). However, the project could be delayed due to political tensions over territorial matters. (www.enerdata.net)

[RENEWABLE ENERGY / CLIMATE CHANGE TRENDS]

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Himachal Pradesh identifies 12 sites for wind energy plants

March 1, 2016. Twelve sites have been identified in the past three years for setting up of wind energy plants in Himachal Pradesh, state Power Minister Sujan Singh Pathania said. He said that the sites were located in Kullu, Chamba, Kinnaur, Lahaul-Spiti and Shimla districts. The National Institute of Wind Energy has been requested to set up mapping stations to assess the wind potential at these sites, the minister said. Even Himachal Pradesh State Electricity Board Ltd has proposed to install a hybrid power plant of 2.5 MWp or megawatt peak at Rangrik in Kaza in the Spiti Valley. The project will have 2 MWp solar PV installation and wind turbines of cumulative capacity of 500 KWp. The minister said that the foundation stone of the power plant was laid by Chief Minister Virbhadra Singh on June 19 last year. (www.newkerala.com)

Budget 2016: Coal cess in line with India's climate commitments

March 1, 2016. Clean energy tariffs will rise by 15-20 paise due to Budget proposals, but doubling of the green tax on coal to ₹ 400 per tonne will help clean energy narrow the gap with conventional power. Finance Minister Arun Jaitley has proposed phase-out of tax concessions to commissioned projects under Section 80-IA of the Income Tax Act, raising costs of power firms. Another proposal that has raised concerns is tax on large dividends. Coal India Ltd (CIL) received a dividend of ₹ 13,000 crore from its subsidiaries last year. Coal consumers like Tata Steel opposed the increase in the cess, but analysts said the steps are in line with India's climate commitments. (energy.economictimes.indiatimes.com)

Meenakshi energy donates solar pumps

February 28, 2016. Andhra Pradesh Chief Minister N. Chandrababu Naidu handed over allotment letter pertaining to a solar pumpset to one of the 123 Scheduled Caste (SC) and Schedule Tribe (ST) beneficiaries, Swarna Guravaiah, durging his visit to the Genco power plant at Krishnapatnam. The Meenakshi Energy Pvt Ltd (MEPL) came forward to implement the solar initiative under its Corporate Social Responsibility (CSR). Two ₹ 7.3 lakh worth Tata Solar pump sets were furnished free of cost to eight farmers to irrigate 10 acres of land at Dumpavaripalli of Thirumalapuram Gram Panchayat under a pilot project. Later, the MEPL decided to supply 121 solar pump sets in two phases by paying the beneficiaries' share of ₹ 55,000 in the NTR Jala Siri Programme and partnering with the authorities in this renewable platform by spending ₹ 66,55,000. The MEPL-GDF Suez had entered into MoU with District Water Management Agency (DWMA) and New and Renewable Energy Development Corporation of Andhra Pradesh (NREDCAP). As a whole the company has been spending around ₹ 75 lakh on this initiative, Chief Operating Officer (COO) MEPL Jamil Amin said. (www.thehindu.com)

Suzlon bags 71 MW order for wind turbine generators from GIPCL

February 26, 2016. Suzlon Group announced that it has bagged an order for 71.40 MW wind power project from state public sector undertaking (PSU) Gujarat Industries Power Company Ltd (GIPCL). As part of the order, Suzlon will install 29 units of S97-120m wind turbine generators (WTGs) with all steel hybrid tower and 5 units of S97-90m WTGs with tubular tower having rated capacity of 2.1 MW each. Located in Kutch district, Gujarat, the project will be completed in three phases with execution culminating by April 2017, wherein Suzlon will execute the entire project on a turnkey basis, apart from providing operation and maintenance services for a period of 20 years through an integrated service package, the group stated. According to Suzlon, as of March 2015, Gujarat's total wind installations stand at 3,645 MW, out of which 1,742 MW has been contributed by Suzlon. Suzlon's wind energy installations in Gujarat offset approximately 3.5 million tonnes of CO₂ emissions, thereby supporting the transition of the state to a sustainable energy mix, the group claimed. (www.business-standard.com)

WTO rules against India in solar power dispute

February 25, 2016. India lost a case at the World Trade Organization (WTO) after the global trade body said power purchase agreements signed by the government with solar firms for the ambitious National Solar Mission did not meet international norms. The US had filed a complaint before the WTO on this issue in 2014, alleging foreign firms would not be able to take part in India's electrification programmes and the lucrative government contracts that came with it. It said a clause relating to domestic content requirement (DCR) for the procurement of solar cells and modules under Phase-I and Phase-II of the Jawaharlal Nehru National Solar Mission were discriminatory and "nullified" the benefits accruing to American solar power developers. Commerce and Industry Minister Nirmala Sitharaman had said that India and the US have engaged multiple times to settle the long-running solar power trade dispute through mutually agreed solution at WTO. The panel found that DCR measures were not distinguishable in any relevant respect from the domestic content requirements previously examined under this provision by the Appellate Body in Canada — Renewable Energy / Feed-In Tariff Programme. India has an ambitious target of generating 20,000 MW of solar power by 2022. (www.business-standard.com)

Tata Power wind power project gets forest clearance in Karnataka

February 24, 2016. A green panel in the State has given forest clearance to Tata Power Company for setting up of a 52.50 MW wind power project in Koppal district, Karnataka. The proposal was examined by the Regional Empowered Committee (REC) of the Environment Ministry in its recent meeting. The panel has given clearance for diverting forest land of 36.27 hectare instead of proposed 39.10 hectare in the Hanamasagara protected forest in Koppal district for setting up of a 52.50 MW wind power project. The company has been asked to use the existing roads inside the forest land for this project, thereby limiting the requirement of forest land to 36.27 hectare. RECs are empowered to approve diversion of forest land for projects up to 40 hectares, except the proposals relating to mining, regularisation of encroachments and hydel projects. (www.thehindubusinessline.com)

Global.....

Japan to stipulate 80 percent emission cut goal by 2050

March 1, 2016. The Japanese government will stipulate a long-term goal of cutting greenhouse gas emissions by 80 percent by 2050 from current levels. The move follows the international climate agreement reached in Paris in December 2015. The plan, being compiled by the environment ministry and the ministry of economy, trade and industry (METI), is likely to be approved by the cabinet before Japan hosts the Group of Seven (G7) summit in May. The government is obligated by law to update the national plan for cutting emissions, but it has not had a new plan since fiscal 2013 partly because energy policy was thrown into disarray by disasters, including the 2011 Fukushima nuclear crisis. Prior to the global climate talks in Paris, the administration decided on a goal of slashing greenhouse gas emissions by 26 percent in 2030 from 2013 levels, which will be included in the upcoming plan. Under the envisioned plan, the government will seek to introduce more renewable sources while also aiming to have all households shift to more energy-efficient LED lights by 2030. As for coal-fired plants, which emit more carbon dioxide than other energy sources, METI will set standards for their power generation efficiency and encourage scrapping of inefficient facilities. (www.newkerala.com)

France's solar PV capacity reached 6.5 GW in 2015

February 29, 2016. According to the French General Commission for Sustainable Development, the number of solar PV facilities rose by 5% in 2015, raising total solar capacity by 879 MW, from 5,669 MW to 6,549 MW. A 300 MW solar PV project was connected to the network in December 2015 and the bulk of new installations consisted of small-size solar arrays. At year-end 2016, there were 22,322 projects awaiting for a grid connection, including 12,301 having already signed a grid connection convention. (www.enerdata.net)

Japan plans biggest test of carbon capture north of quake site

February 29, 2016. Japan is preparing to test its biggest project yet for capturing and storing greenhouse gas pollution under the seabed despite concerns about cost and the safety of pursuing the technology in a region prone to earthquakes. Engineers plan to inject carbon dioxide into deep saline aquifers off the coast of Hokkaido at the northern tip of the nation starting in April. The gas will be siphoned away from a refinery operated by Idemitsu Kosan Co. under the government-backed project. Five years after an earthquake and tidal wave triggered an atomic meltdown in Fukushima, Japan is grappling for ways to generate power while meeting global goals for reducing fossil-fuel emissions. Carbon capture and storage, tested in many nations but working at a commercial scale almost nowhere, holds the promise of limiting the most damaging fumes from thermal power plants and giving Japanese companies a vast new market. (www.bloomberg.com)

Ontario plans to raise \$1.4 bn from carbon pricing program

February 26, 2016. Ontario plans to raise C\$1.9 billion (\$1.4 billion) a year from its proposed cap-and-trade program starting in 2017 as it joins with Quebec and California to reduce greenhouse gas emissions. Canada's most-populous province projects it would generate about C\$18 per carbon tonne in the joint market where businesses buy carbonemission allowances in an auction. Proceeds will be directed toward boosting energy efficiency, public transport, geothermal projects and clean technology, the government said. The first auction in March next year would raise about C\$478 million. Ontario is the latest Canadian province to introduce a regime to reduce greenhouse gases, which it's aiming to cut by 15 percent below 1990 levels by 2020 and 37 percent by 2030. Selling carbon allowances differs from oilproducing Alberta, which plans to increase its carbon tax on emissions to C\$20 per tonne in 2017 and to C\$30 in 2018, and British Columbia's C\$30 per tonne tax. Cap and trade would cover about 82 percent of the province's greenhouse gas emissions, affecting industries, institutions, electricity generators, and suppliers and distributors of heating and transportation fuels above 25,000 tonnes or 200 liters. The economy-wide cap would decline by about 4.2 percent a year starting in 2017 through the 2020 target. Industries with high emissions and facing international competition, such cement, lime and steel, would get free allowances until 2020 when the government will review the program. The program would increase energy costs for households about C\$13 a month in 2017, including adding about 4.3 Canadian cents per liter to gasoline and about C\$5 per month more to natural gas prices. Residential electricity prices are expected to decline about C\$2 per month, the government said. The Ontario government has already invested C\$325 million announced in 2015 in sustainability initiatives. (www.bloomberg.com)

China picking winners in solar industry with backing for Yingli

February 26, 2016. China is starting to pick the companies most likely to survive a shakeout in the solar industry, negotiating loans for the struggling panel maker Yingli Green Energy Holding Co. The action by the state-owned China Development Bank Corp. is part of the nation's efforts to spur consolidation among photovoltaic makers through mergers and restructuring, the China Renewable Energy Society said. The China Development Bank and the government in the city of Baoding, where Yingli is based, are about to lend about 3.3 billion yuan (\$505 million) to Yingli, marking the first financial help by a state policy bank to a struggling solar panel maker. Solar power is one of the clean-energy technologies China's government is backing as it pushes to cut fossil-fuel pollution that has blanketed Beijing and other leading cities with thick smog. The government has said it wants to have several solar producers that can manufacture on a large scale, rather than hundreds of smaller players. (www.bloomberg.com)

Oil industry sees Paris climate deal as chance to innovate

February 26, 2016. If a crisis is a terrible thing to waste, the oil industry sees the Paris climate accord not as a death knell, but an opportunity to innovate and even grow. The move is a shrewd one for an industry that has been on the defensive for years on climate issues, constantly fending off attacks that its products have contributed to an unhealthy rise in global temperatures. While the landmark emissions-reduction agreement among 195 countries late last year was seen as a defeat for fossil fuel producers, executives and oil ministers sounded a clarion call at their first major meeting since the Paris talks

for more research into how carbon capture technology can be cheapened and perfected. The hope is that this and other technologies could sharply cut oil and natural gas emissions, protect the industry from the ramifications of climate change legislation and ensure developing economies still have access to inexpensive energy. The MIT Energy Initiative said that other sources of energy, including renewable technologies, should be part of the oil industry's research focus, to transition away from fossil fuels in the coming decades. Ali Al-Naimi, Saudi Arabia's oil minister, called climate change a greater challenge for his industry than even crude price CLc1 gyrations. Naimi, who attended the Paris meetings, said his nation - the Organization of the Petroleum Exporting Countries' de facto leader - is committed to finding technological solutions to slash emissions. Oil companies have pulled off technological surprises before. An Exxon Mobil Corp engineer invented the lithium ion rechargeable battery in 1975 amidst widespread concern oil supplies would run out. While that battery failed to immediately take off, it is now used by Tesla Motors Inc to power its electric cars. Naimi insisted the oil industry was a "force for good," providing fuels for economic growth in developing nations. Industry leaders say it is hypocritical for societies to continue to use products derived from fossil fuels while demanding an end to oil and gas extraction. (www.reuters.com)

EU eyes interlinked carbon markets from California to China

February 25, 2016. The European Union (EU) wants to work on a plan to introduce a global system of carbon markets to help reduce heat-trapping gases and encourage investment in clean technologies, according to EU energy union chief Maros Sefcovic. The EU runs the world's biggest emissions-trading system, which covers around 12,000 installations owned by utilities and manufacturers as well as airlines. The market is the 28-nation bloc's flasghip tool to meet its targets to reduce pollution by 20 percent in 2020 compared with 1990 levels and at least 40 percent by 2030. Sefcovic said he raised future linkages among emissions trading systems in talks with representatives of global companies during UN climate summit in Paris in December. Under a climate deal reached at the gathering, almost 200 countries agreed work toward capping global temperature increases since pre-industrial times to 2 degrees Celsius (3.6 degrees Fahrenheit). (www.bloomberg.com)

China asks for urban ban on high-sulphur diesel in clean fuel push

February 25, 2016. China has asked local governments in 11 provinces to ban in urban areas the selling of high-sulphur diesel that is used for industrial and farming purposes rather than in automobiles, Beijing said in a policy document. The request comes after China rolled out "national five" standards for gasoline and diesel on Jan. 1 in the 11 provinces in the more economically developed eastern part of the country. The standards are equivalent to Euro V specifications that allow a maximum sulphur content of 10 parts per million (ppm). Due to lax supervision, however, "general diesel" or diesel with a high-sulphur content is still being sold at urban petrol stations in the provinces that come under the new policy, the National Development & Reform Commission (NDRC) said. Only kiosks in rural areas or along the rivers should be allowed to sell high-sulphur diesel, the NDRC said. The agency requires all service stations to mark clearly the names and quality of their fuels to help motorists select the grades they want and to allow authorities to supervise fuel quality, the NDRC said. (www.reuters.com)

US unveils \$40 mn initiative to develop better materials for clean energy

February 25, 2016. The US Department of Energy (DOE) has launched a new \$40 mn initiative to accelerate advanced materials research and development (R&D) for clean energy solutions. The National Laboratory-led initiative, Energy Materials Network (EMN), is aimed at designing, testing, and production of advanced materials. In particular, the initiative aims to decrease the time-to-market for advanced materials innovations for clean energy technologies. The EMN's four initial consortia will be backed by DOE's Office of Energy Efficiency and Renewable Energy. The funding will help in establishing EMN's four initial National Laboratory-led consortia and solicit proposals for collaborative R&D projects with industry and academia. (solar.energy-business-review.com)

Alsons plans \$650 mn investment in renewables in the Philippines

February 25, 2016. Alsons Consolidated Resources, the renewable branch of Philippines group Alsons, has announced up to US\$650 mn investments in hydropower and solar power projects in the Philippines in the next five years, as part of its strategy to diversify its power mix to renewable energies. Alsons has 97 MW of hydropower contracts for four rivers with the Department of Energy (DOE) and plans to start construction of the first 15-16 MW run-of-river power plant on the Siguil river in 2016. A 40 MW hydropower plant will be developed in Negros along Bago river, and two additional projects are expected in Mindanao, where a solar power plant should be built. (www.enerdata.net)

US EPA chief warns rules will challenge oil, gas

February 24, 2016. The United States (US) Environmental Protection Agency (EPA) chief Gina McCarthy vowed to do more to regulate the methane leaking from oil and natural gas operations and defended the Obama administration's Clean Power Plan, saying a court stay won't stop the agency from fighting pollution. McCarthy said that the methane regulations her agency is developing "really are going to be challenging" for the energy sector. She said the agency will work with states including Virginia, Pennsylvania, Connecticut and Delaware to curb power-plant pollution despite a Supreme Court decision to put on hold the Clean Power Plan. The Supreme Court stay froze in its tracks a policy at the center of Obama's environmental legacy that would require states to use less coal and employ more wind, solar and natural gas-fired power to achieve carbon emissions cuts of 32 percent by 2030 from 2005 levels. The power plan and methane rules are both part of a slew of regulations that the EPA has brought forth in recent years in its effort to regulate pollution from the energy sector. McCarthy said the window for compliance under the Clean Power Plan had been "extended" so that the agency wouldn't lose time in implementing it. (www.bloomberg.com)

Guangdong plans to include new industries in carbon exchange

February 24, 2016. China's southern province of Guangdong is planning to expand the number of industries to be included in its carbon-trading exchange amid steps to integrate the regional trading program into planned national emissions exchange. China Emissions Exchange, which overseas carbon trading in every part of the province except the city of Shenzhen, has finished looking at the greenhouse gas emissions of six industries including ceramics, civil aviation and papermaking ahead of possibly including the industries in the program, President Ye Jun said. Next, economicplanning authorities at both the provincial and national levels will determine the number of new industries and key emitters to be added, he said. The exchange currently covers more than 180 companies in four industries including power, cement, steel and petrochemicals, Ye said. The additions would be a way of preparing ahead of the national carbon-trading program which the government said will cover eight sectors. China wants to start the national pollution-trading system in 2017 to cut global-warming emissions. The national system will be developed using a cap-and-trade rule, under which the biggest corporate polluters buy credits from those that don't pollute as much. The idea is that the emissions-trading system prompts companies to cut their emissions so they can sell their unused allocations. The exchange is one of seven pilot projects initiated by China. China Beijing Environment Exchange, another pilot, expects to more than double the number of companies included in the city's market. China Emissions Exchange is also planning to push carbon-trading cooperation in the Pan-Pearl River Delta region, including nine Chinese provinces along with Hong Kong and Macau, Ye said. (www.bloomberg.com)

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