NEWS FLASH – 13th December, 2016

SUGAR

Record production of ethanol may cut fuel bill

Sugar mills recorded the highest ever production of ethanol of more than 110 crore litres during 2015-16 crop year, over 50% more than what was produced during the previous year.

According to food ministry officials, this resulted in achieving 4.4% ethanol blending in petrol, which was almost double of 2014-15. Government has set a target of increasing this blending of ethanol in petrol to 10% in its bid to reduce import of crude oil. Ethanol is produced from sugarcane molasses. Blending of ethanol in petrol helps in saving fuel, and consequently foreign exchange.

(Source-http://sugarnews.in/record-production-of-ethanol-may-cut-fuel-bill/, published on 12th December, 2016)

Maharashtra: Sugar millers in a price race to attract growers

Sugar millers in Maharashtra have embarked on a price war in order to attract cane from growers as paucity of cane threatens to severely affect their sugar production this crushing season. Millers, especially from Pune, Solapur and the districts of Marathwada, have announced the first installment prices way above their normal fair and remunerative prices (FRP).
With only 6.5 lakh hectares of cane area, the crushing season 2016-17 is supposed to be a short one. Paucity of cane has especially been acute in the districts of Marathwada, Pune and Solapur where millers are now hard-pressed to source cane.

On an average, the first installments announced by millers are Rs 400-600 more than the FRP. In Pune, 10 mills have announced first installment prices above the FRP with the prices ranging from Rs 2,400- 2,550 per quintal of cane crushed.

Mills in this area normally pay FRP in the range of Rs 2,200- 2,300 per quintal of cane crushed. The competition is fierce in Solapur, where millers have adopted the same formula even though the FRP of the region is between Rs 1,664-Rs 2175 per quintal of cane crushed. Millers here have announced the first installment at Rs 2,550 per quintal. Marathwada has, by far, seen the largest price rush with some millers announcing Rs 900 above their FRP as the first installment price. With just 26 out of 51 mills operational in this region, most of the mills are trying hard to attract cane before the season runs out. The price war is led by private millers in Marathwada, while both cooperative and private mills are in the price race in Pune and Solapur. The short season and paucity of cane had prompted Swambhimani Shetkari leader Raju Shetti to ask for Rs 3,200 as the first installment payment for cane during his Oosh Parishad (cane conclave) at Jaishingpur, Kolhapur district two months back.

The cane growers had finally agreed to accept price of Rs 175, in addition to the FRP, as their first installment payment.

Senior officials from the sugar commissionerate said the price war is basically to attract cane growers.

(Source-http://sugarnews.in/maharashtra-sugar-millers-in-a-price-race-to-attract-growers/, published on 12th December, 2016)

Sugar mills buy cane worth Rs 429 crore in current season

Sugar mills in the district have purchased cane crops worth Rs 429.46 crore and released Rs 186.23 crore to the farmersduring the current season, a top official said.

District Cane Officer OP Yadav told reporters here today that sugar mills — Khatoli, Mansurpur, Titawi, Tikola, Moena, Khaikheri and Bhesani — have purchased cane crops worth Rs 439.46 crore. All these mills, barring Bhensani, have released Rs 186.23 crore to the farmers.

(Source- http://sugarnews.in/sugar-mills-buy-cane-worth-rs-429-crore-in-current-season/ , published on 10th December, 2016)

Praj Industries and IOCL to build new bio-ethanol plants in India

Praj Industries has signed a binding agreement for cost sharing with Indian Oil (IOCL) to establish two new second-generation (2G) bio-ethanol plants in Haryana and Gujarat, India.

Once completed, the new plants will be capable of producing 100,000l of ethanol a day.

In September, IOCL selected Praj as its technology partner to establish various 2G bio-ethanol plants based on its indigenously developed technology.

Under the deal, Praj will also provide plant machinery and help IOCL to operate and maintain the facilities.

It has been reported that 2G bio-ethanol technology uses ligno-cellulosic biomass or agri-residue as feedstock, helping the farming community to earn more revenues from agri-waste.

The bio-ethanol also helps reduce dependency on imported crude oil.

Praj Industries executive chairman Pramod Chaudhari said: "We are pleased with the progress of setting up of 2G ethanol projects by the OMCs.

"Praj is equally committed to partner with OMCs in their achievement of completing project targets."

"This is in line with the Government of India's vision of increased contribution of renewables in India's energy portfolio."

Furthermore, India's Bharat Petroleum (BPCL) has selected Praj as a technology partner to set up a 2G bio-ethanol plant in Orissa.

Praj currently provides solutions to bio-ethanol facilities and brewery plants, as well as water and wastewater treatment systems.

(Source-http://sugarnews.in/praj-industries-and-iocl-to-build-new-bio-ethanol-plants-in-india/, published on 9th December, 2016)

COGEN

No capacity addition needed for coal-based power from 2017-2022: draft plan

There will be no need for coal-based power generation capacity addition from 2017 to 2022 according to the Draft National Electricity Plan, 2016. The draft floated by the Central Electricity Authority, the government's power policy ideating and monitoring body, also projects a subdued demand for power with a 20.7 per cent lower peak demand in 2026–27.

The study assumes a committed capacity addition of 4,800 MW from nuclear, 12,000 MW from hydro and 100,000 MW from renewable energy sources during 2022-27. According to demand projections for the year 2026-27, "the study for the period 2022-27 reveals that a coal-based capacity addition of 44,085 MW is required. However, as coal based capacity of 50,025 MW is already under construction which is likely to yield benefits during 2017-22; this coal based capacity would fulfil the capacity requirement for the years 2022-27."

The report projects that peak demand is 235 GW at the end of year 2021- 22 which is around 17 per cent lower than the corresponding projections made by 18th Electric Power Survey (EPS) report. It further projects a peak demand of 317 GW at the end of 2026-27 which is around 20.7 per cent lower than the corresponding projections made by 18th EPS report. Interestingly, demand side management, energy efficiency and conservation measures would aid to a reduction in peak demand. The report notes that reduction in peak demand (MW) for utilities will be by 7277 MW in 2016-17, 9436 MW in 2021-22, and 12324 MW in 2026-27.

Capacity addition from conventional sources will be 1,01,645 MW. This stands at 115 per cent against the target of 88,537 MW. The report also notes that 56 per cen of the total capacity addition during the 12th Plan will be coming from private sector. Capacity addition for hydro and nuclear (hydro – 5,601MW and nuclear -2,800 MW) in the 12th Plan period will be strained and the report notes that there is "likely to be considerable slippage" and that "factors affecting capacity addition in hydro and nuclear sectors need to be addressed urgently."

(Source-http://www.thehindubusinessline.com/economy/cea-coal-power/article9423872.ece,published on 12th December, 2016)

Leveraging the sun to power India's future

This solar power sector has enormous potential but many challenges lie ahead as well

In 2014, when Prime Minister Narendra Modi first placed solar energy at the core of the energy mix that would fuel India's economic growth, scepticism abounded: how will the government deliver? Isn't the target of 100 gigawatts (GW) of solar energy, later revised to 175GW of renewable energy, by 2022, too ambitious? Also, isn't solar energy expensive? How will India's poor afford it? Just about two years later, the answers are emerging—slowly but steadily.

This past Friday, the Solar Energy Corporation of India (SECI) called for bids to install 1GW of rooftop solar power projects on central government buildings—its largest tender yet in this

segment. India is already home to the world's largest single-location solar power plant which has been set up by the Adani Group at Kamuthi in Tamil Nadu. The 648 megawatts (MW) project, built in a record time of eight months, dislodged California's 550MW Topaz Solar Farm in September to secure the top spot and propel India past the 10GW total capacity threshold.

Indeed, huge advances have been made in the past few years—in terms of solar energy specifically and renewable energy in general. According to a Bloomberg New Energy Finance report, the solar sector has had an impressive compound annual growth rate of 59% in the last four fiscal years and its installed capacity at the end of the FY2016 was pegged at 6.8GW. Similarly, the share of renewable energy in India's total energy mix has also increased from 12.5% in FY2013 to 14.1% in FY2016. Yes, this also shows how fossil fuels still make up the majority of India's energy basket but let's not ignore how quickly renewables are catching up. With a cumulative CAGR of 15%, renewables are growing at a faster rate than coal power plants, which are increasing at 12.5%.

Now, place this against the backdrop of India's large untapped renewable energy potential—according to the government-developed India Energy Security Scenarios, India can achieve 479GW of solar power and 410GW of wind power by 2047—and it is possible to see how, if India plays its cards correctly, solar and other forms of renewable energy may eventually drive economic growth. Specifically, India seems to be on track to achieve its Intended Nationally Determined Contribution, promised as part of the Paris pact to fight climate change, to get at least 40% of its total installed power from non-fossil fuel sources by 2030.

In terms of pricing, SECI breached new frontiers yet again in November with a record low tariff offering of Rs3 per unit. The winning firm at the reverse auction—Gurgaon-based Amplus Energy Solutions Pvt. Ltd, which will be installing a total of 14.5MW of solar rooftop plants across the country—has promised these rates specifically for Uttarakhand, Himachal Pradesh and Puducherry. At one level, low tariff offering doesn't come as a surprise—this figure has been consistently falling since 2010 when it was pegged at Rs17.91 per unit; over the past few years, it had somewhat stabilized at about Rs5 per unit when the US-based SunEdison, one of the world's largest renewable energy firms and which has now filed for bankruptcy protection, shook up the market in late 2015, offering to sell power at Rs4.63 per unit to win NTPC Ltd's contract for a 500MW solar park in Andhra Pradesh. Months later, in January, Finnish company Fortum FinnSurya Energy Pvt. Ltd went a step ahead and quoted Rs4.34 per unit to secure the contract for 70MW solar plant at NTPC's Bhadla Solar Park in Rajasthan.

What these low rates now mean for consumers is that solar energy, which until recently was too expensive for large-scale use in a developing country, is now on track to compete with cheap fossil fuels. Today, India's cheapest electricity tariff is at around Rs1-2 per unit. This rate is for the farm sector which is followed by the residential sector and then the commercial sector. But while these are of course promising figures, there is still a long way to go. The low tariffs, for example, are a double-edged sword. Driven by aggressive bids from firms desperate for a toe-hold in this sunrise sector, they have fuelled concerns about viability and project financing, especially for those below the Rs5 per unit threshold. SunEdison, in fact, has put its India assets on the block (some of which were incidentally picked up by Amplus).

Moreover, India still has to make available the necessary capital for developing renewable energy infrastructure—the former Planning Commission had estimated under the 12th Five Year Plan that more than a trillion dollars will be required—and it will have to work every option on the table (from domestic industry to international donors) to fund this turnaround. Similarly, several structural issues in the distribution of power need to be addressed. India's installed capacity of 275GW is already in excess of its demand of 140GW. Yet, there are still parts of the country where there is no electricity while in many others, power cuts are the norm.

This is due to a variety of factors such as coal supply shortage, transmission losses and the poor health of power utilities.

As renewables enter this mix, they will have to be integrated into the existing system and structure. As a NITI Aayog expert group report notes, "A probable re-engineering of institutions, the redefinition of policies, the re-tuning of power systems, and the replacement of old habits with new ones" will be required. This fundamental re-structuring of the country's power and energy infrastructure will be its biggest challenge.

(Source-http://www.livemint.com/Opinion/Xx400nyeM53lUkoU3STcxO/Leveraging-the-sun-to-power-Indias-future.html, published on 13th December, 2016)

Quote of the day

'In order to carry a positive action we must develop here a positive vision.' - Dalai Lama