

Power Sector in Andhra Pradesh and Telangana during June, 2015

Policy

AP to set up fibre cable network using power poles

The Andhra Pradesh government has approved a plan to use 3.60 lakh electric poles, covering a total length of 23,000 km, to provide connectivity to thousands of towns, villages and habitats. These poles will be used to carry internet cables. The AP State is planning to use this extensive network to provide broadband to about 1.3 crore houses. The State Government has approved the Fibre Grid project, promising 10-15 mbps to houses for just Rs. 150 a month and 100 mbps speed for businesses. The State expects to save a lot of money by utilising the robust network of electric distribution lines. All the electric poles will be geo-tagged. The GPS (global positioning system) information of all the poles and the respective sub-stations will be captured. To implement the project GoAP will set up AP Fibre Corporation with an initial investment of Rs. 10 crore.

Chief Minister of Telangana during the first anniversary celebrations of formation of Telangana **promised that 24 hour electricity supply** would be provided to all categories of consumers by the end of 2018.

Generation

GVK plant served 'buy-out' notice by AP utilities

APSPDCL and APEPDCL, two distribution companies of AP, have issued a "Buy-out" notice to GVK Power & Infrastructure Limited to take over the 217 MW gas based power plant at Jegurupadu in the East Godavari district as its power purchase agreement expired on June 19, completing its 18-year tenure.

The two DISCOMs engaged the services of independent consultant Grant Thornton to value the power plant. The consultant has valued the project at Rs. 370 crore, which includes Rs. 76 crore for some related assets and stocks. GVK is given 60 days time for their response and to conclude the process. In the past the GVK has estimated the cost of refurbishment at about Rs. 550-600 crore. The plant is currently getting gas enough to run it at 30 per cent plant load factor.

Telangana is also reported to be keen to buy out the project as it would find it equally attractive to take over such an asset created in unified AP. But AP contends that since it is in its jurisdiction it would acquire it.

AP short lists successful bidders

DISCOMs of AP called for bids to procure 2,400 MW on the revised case-I bidding document, which allows for annual revision of rate, over the period of the power purchase agreement of 25 years.

Of the 12 companies that bid for a total 6,579 Mw, seven qualified for cumulative power sale of 3,984 Mw. Among the selected companies are East Coast Energy, Adani Power (Korba), MB Power, a special purpose vehicle of Hindustan Power Projects in Madhya Pradesh, Mahan project of Essar, the Korba power plant of Lanco and Jindal India's thermal power project in Angul.

DISCOMs are likely to buy 2,400 megawatts (Mw) under a tender in the range of Rs 4.27-4.98 a unit. The rate quoted has two components, fuel cost and fixed capital cost, inclusive of transmission charges and other variables. The criteria required bidders to quote the fuel and fixed cost separately

Company	Power Plant	Quantity quoted to sell (MW)	Rate per Unit (Rs)	Fuel cost per unit (Rs)	Fixed cost per unit (Rs)
East Coast	Srikakulam, AP	489	4.27	1.41	2.86
NCC	Nellore, AP	500	4.35	1.79	2.56
Adani Power	Raigarh, Chhattisgarh	540	4.49	0.99	3.50
Hindustan Power	Anuppur, MP	374	4.69	1.06	3.63
Jindal Power	Angul, Orissa	400	4.83	1.04	3.79
Essar	Mahan, MP	500	4.83	1.03	3.80
Lanco	Korba, Chhattisgarh	1,181	4.98	0.89	4.09
Total		3,984			

According to analysts, "The power generators have done their risk distribution competitively. The costs of their 20 per cent open power capacity, which gets no domestic coal, and the transmission charge of 60-70 paise a unit is being loaded on the final rate," and "the capital

cost for the developers had gone up and they were factoring the same in the fixed cost rather than the fuel cost. This would be detrimental on the total cost in the long term”.

Although the weighted average tariff of R4.57 per unit for the first year of the 25-year PPAs quoted by the top five bidders under the newly designed Case 1 mechanism was among the lowest in the last five years, it included a record-high fixed-cost component of 73%, implying the risk lies with the buyers and the end consumers rather than with the developers. In the past, fixed costs have never been more than two-fifths of the tariff discovered under bidding.

The tariff discovered is for the first year of supply and will be revised annually as per an index linked to inflation, depreciation and debt mitigation developed by the Central Electricity Regulatory Commission. While the higher share of fixed costs in the tariff gives the developers considerable comfort, consumers would need to worry only if fuel and other variable costs rise exorbitantly, said analysts, adding that there was only slim chances of that given the efforts to boost coal production.

The shortlisted power companies would start supplying power to the state from December 2016.

SoftBank to invest in renewable energy projects in AP

Japan's SoftBank Corp's Chief Executive Officer Masayoshi Son expressed interest in collaborating with Andhra Pradesh for projects in the renewable energy sector. He expressed his keenness to invest in solar and wind power projects in Andhra Pradesh. He along with Nikesh Arora, President of SoftBank Corp, and Sunil Bharti Mittal, Chairman of Bharti Enterprises, with whom he set up a \$20-billion solar venture, met with the Chief Minister of AP.

Andhra Pradesh steps up nuclear power push with 2nd site offer

Andhra Pradesh is reported to be in the race for a second nuclear site.

A team from the Department of Atomic Energy (DAE) and the Nuclear Power Corporation of India Limited (NPCIL) is reported to have met AP officials to identify a second coastal site to set up a nuclear plant in the state.

Talks for a second site in Andhra Pradesh are aimed at housing two Russian-designed VVER 1000 reactors that were originally supposed to come up at Haripur in West Bengal. After a series of local protests at Haripur they are looking for alternate sites.

AP govt asks NPCIL to deposit Rs 500 cr ore for proposed N-plant

Government of AP asked the Nuclear Power Corporation of India Ltd (NPCIL), which is planning to set up a nuclear power plant at Kovvada, Ranasthalam mandal in Srikakulam district, to deposit Rs 500 crore for initiating the land acquisition process in a bid to speed up the process. NPCIL proposed to construct 9,600 MWe (6X1600) power project at Kovvada and sought around 2,126 acres of land for the project. NPCIL had agreed to deposit the same. Total R&R cost is estimated to be about Rs. 940 crore.

Suzlon wins ReNew Power's project in Andhra

Suzlon announced that it had bagged a 90.30 MW turnkey project from ReNew Power. It will install WTGs (wind turbine generators) with rated capacity of 2.1 MW each in Ananthpur district, Andhra Pradesh. The project will be jointly developed by ReNew Power and Suzlon, where the latter will act as the turnkey EPC partner. It's expected to provide electricity to 56,000 households and help check 0.195 million tonnes of CO2 emission annually.

AP and Telangana seek green nod for 1400 MW power projects

State-owned power producers of Andhra Pradesh and Telangana have separately approached the Ministry of Environment and Forests (MoEF) seeking clearance for the expansion of power projects in their respective states

The Andhra Pradesh Power Development Company (APPDCL) sought green approval to expand capacity of Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS) in the Nellore district by adding 1X800 MW

Singareni Collieries Company (SCCL) wants to add another 1X600 MW to its existing 2X600 MW thermal power plant in the Adilabad district

Telangana and Andhra Pradesh dispute over Nagarjunasagar tail pond project

A fresh dispute has surfaced erupted between AP and Telangana over the ownership and operation of the Nagarjunasagar tail pond project. While the power house is situated in AP region, the dam is in Telangana state. The distribution of the project has been done in such a manner that no state alone can operate the 50 MW hydro-electric project.

Telangana energy secretary Arvind Kumar wrote to the Andhra Pradesh government seeking management of the power house in order to ensure optimal use of the project. As opposed to this AP officials maintained, "The power house at Nagarjunasagar Tail Pond has been allotted to Andhra Pradesh in the AP Reorganization Act and we will protect our rights over the project. Telangana has to limit its role to the maintenance of the weir below the main reservoir".

First Solar commissions 20 MW PV plant in Telangana

First Solar's first 20 MW utility scale solar photovoltaic (PV) project in Telangana at Marikal has begun commercial operation. The 20-MW project has been established with a 20-year PPA (power purchase agreement) to sell power to the Southern Power Distribution Corporation of Telangana at a levelised tariff of Rs. 6.49 /kwh.

Lanco to supply power to Telangana

Lanco Infratech and Telangana DISCOMs entered in to agreement for sale of power to the extent of 325 Mw from Lanco's two merchant plants located in AP. This is from 500 Mw of power that will be generated from the stranded gas power project under the Centre's Power Sector Development Fund (PSDF) scheme. Power generation from the stranded capacity is expected to start from June 12 or June 15 depending on gas supply. AP power utilities had decided to procure about 140 Mw from GVK's 230-Mw Jegurupadu Stage II and GMR's 370-Mw Vemagiri plant under this policy, forcing the other projects to find other markets. Following the Lanco deal, the 384-Mw GMR Rajahmundry gas power project (GREL) is the only plant now that is yet to find a customer.

Telangana to add 2,500 MW solar PV capacity

The Southern Power Distribution Company of Telangana Limited (TSPDCL) has called for Request for Selection (RFS) for procuring 2,000 mw of solar power on long-term basis through reverse tariff-based competitive bidding. The last date for the bids is June 30. The bids were divided into group-I and group-II based on the injection voltage levels. The

capacity under group-I bids is 500 mw and group-II bids will be 1,500 mw. While the tariff ceiling for group-I bids is Rs 6.450/kwh and group-II bids is 6.320/kwh.

This can be considered as a part of the Telangana Government's plans to add 2,500 MW solar photo-voltaic power generation capacity. This new capacity expected to be added by next year kharif crop season. In November 2014, it had allocated 515 MW of solar PV projects. Prior to that 232 MW of solar projects were inked, and another 2,000 MW would be finalised, taking the proposed capacity to 2,747 MW by next year. This is aimed at ensuring nine hours of power to the farm sector and sees this possible with the setting up of the solar power generation capacity. The new solar PV units will be set up at locations where there is power shortage during the day time to the farm sector. The deficit in the local district would be bridged by the solar power project.

BHEL, TSGENCO sign agreement for 4,000 MW thermal power station

BHEL and TSGENCO have signed an agreement up to set up a 4,000-MW ultra mega power project at Damarcharla in Nalgonda district of Telangana. This MoU is part of the BHEL and TSGENCO plan to set up 6,000 MW thermal power stations in the State. The Yadagiri thermal power station will have five units of 800 MW involving total cost of Rs. 17,950 crore. The first two units are expected to come up within three years.

The funding requirement for the projects would be met with finance from REC of Rs. 19,000 crore, PFC (Rs. 15,000 crore) and the State Government equity of Rs. 6,000 crore. Of the State Government equity of Rs. 6,000 crore, Rs. 2,000 crore has already been deployed.

BHEL's scope of work in the project would include design, engineering, manufacture, supply, construction, erection, testing and commissioning of 5x800 Mw thermal sets on engineering, procurement and construction (EPC) basis. To overcome the uncertainty of coal supply, BHEL will be supplying its in-house developed fuel flexible boiler, which is capable of firing the entire range, from 100 per cent Indian to 100 per cent imported mix of coal. This will provide security against variation in design coal and the coal actually available during operation, thereby offering operational flexibility to ensure uninterrupted generation of electricity.

Status of new power plants in Telangana

The Expert Committee constituted by the central Ministry of Environment and Forests to examine the proposal to set up 800 MW super critical plant at KTPS, Paloncha was reported to have given environment clearance subject to the condition that the existing four of 60 MW plants and four of 120 MW plants are phased out by 2019. This would amount to loss of 720 MW of power for Telangana state. The Committee is also reported to have scrapped the proposal to acquire 230 acres of land for ash pond and instead asked TSGENCO to explore total utilisation of ash through cement manufacturing.

The Expert Committee constituted by the central Ministry of Environment and Forests to examine the proposal to set up 1080 MW Bhadradi Power Plant at Manuguru in Khammam district has recommended that the project be either changed to supercritical technology or be placed before the Ministry of Power for prior approval. It had pointed out that the recent orders of CEA and Ministry of Power allowed only supercritical technology for power plants.

Secunderabad Cantonment Board (SCB) has decided to set up **one MW** solar PV power plant to meet the needs of including water pumping and street lights. The plant is expected to cost Rs. 7 crore with a 30% subsidy from MNRE. Surplus power will be sold to TSSPDCL through net metering system. This plant is being treated as pilot one. Later SCB plans to set up 5 MW solar PV plant.

Salar Jung Museum, Hyderabad installed a 500 kW capacity solar PV plant

WindStream Technologies sets up Solar Mill facility in Telangana

The US-based WindStream Technologies in partnership with West Coast Venture, Bengaluru has set up its first manufacturing base outside the US in Hyderabad with an investment of \$3 million. The 50,000-sq-ft unit in the industrial estate at Maheswaram near the Rajiv Gandhi International Airport, will roll out integrated wind and solar hybrid product called SolarMill. Initially, 80 per cent of the product will come from the US and be assembled here. By the beginning of 2016, the entire manufacturing capability should be available here. The unit will be scaled up as demand grows. The SolarMill, which has a installed capacity of 2.5 kW (1.5 kW solar and 1 kW wind) can be useful for both domestic and small industrial uses, especially in remote and coastal areas. It assures 24/7 power generation, offsets seasonality, has five-year warranty and 25-year life with a smaller battery size. Already WindStream Technologies has installed 10-15 SolarMills in the country.

Fuel

RIL partner to defer investments in KG basin

Canada's Niko Resources Ltd a partner in the D6 block of RIL, announced that it decided to keep planned investments on hold due to lack of clarity on gas prices in India, in a continuation of its year-old stand.

Niko Resources owns 10% in the D6 block—which contains the flagging D1 and D3 gas fields—located in the Krishna-Godavari basin in the Bay of Bengal, while UK-based BP Plc holds 30%. RIL is the operator of the block with a 60% stake.

Reliance Industries to give away one gas find at KG-D6

RIL and its foreign partners BP and Niko Resources would give away one gas discovery — D31 — and do the drill stem tests (DST) to confirm the extent of hydrocarbon presence in two other discoveries — D29 and D30 — in the KG-D6 block. The move comes in the wake of the Cabinet Committee on Economic Affairs decision on April 29 that gave the explorers, including RIL and ONGC, that did not do the DSTs for some discoveries three options: Do DSTs and validate the discoveries, relinquish them or ring-fence them, which means go ahead without DST but at own risk.

In February 2010, RIL submitted declarations of commerciality (DoCs) for gas discoveries D29, D30 and D31 in the KG-DWN-98/3 block, commonly known as KG-D6. But in October 2010, the Directorate General of Hydrocarbons said the DoCs could not be evaluated because of lack of sustainable production test data which, as per DGH, is needed under the production-sharing contract (PSC). The three discoveries reportedly have a reserve of 345 billion cubic feet, which was valued at about \$1.45 billion at the then-prevailing domestic gas price of \$4.20 per million British thermal units.

Telangana asks centre to allocate coal

CM of Telangana K Chandrasekhar Rao asked Union minister of state for coal, power and renewable energy Piyush Goyal to allocate coal required for thermal power plants in Telangana soon. He asked the Union minister to ensure that the power corridor connecting the northern grid to southern grid is completed at the earliest.

Distribution

EESL to support AP energy conservation projects

Saurabh Kumar, MD, Energy Efficiency Services Ltd, expressed their readiness to further make fresh investments of up to Rs. 5,000 crore in AP in the next five years in the State on various energy efficiency activities.

High Court upholds APERC Billing Order

A division bench of the Hyderabad High Court comprising Justice Dilip B Bhosale and Justice A Ramalingeswara Rao upheld the method adopted by APERC in deciding electricity tariff for consumer categories. As per the Commission's methodology the consumers are subjected to twin tariff system under which they have been paying two types of charges - one is on the maximum demand charges and another one is on energy charges. The maximum demand is measured in terms of kilo volt amperes per hour (Kvah) and the energy is measured in terms of kilo watts per hour (Kwh). One kilo Watt is one unit. On March 30, 2011, the Commission issued a tariff order effective for the years 2011-2012 approving the proposal for Kvah instead of Kwh based billing and it was made applicable to all HT consumers and LT consumers for whom the tri-vector meters have been provided.

Sharp rise in sowing in Telangana has power officials worried

An unexpected increase in sowing this kharif season in Telangana has kept the officials on tenterhooks. Against 4,28,368 hectares sowed as on June 26 last year, farmers have already begun sowing in a whopping 16,21,505 hectares this year.

The promise of nine-hour guaranteed power supply to the agriculture sector and recent rains across the state might have encouraged farmers to take up planting on a larger scale compared to the last two kharif seasons. The DISCOMs in the state are worried about meeting the electricity demand for kharif from the 20 lakh odd agricultural pumpsets in Telangana.

Added to this, though Telangana received excess rainfall so far this monsoon compared to last year, it did not help fill the reservoirs in the state. From June 1 to 24, the state received 212 mm as against the normal rainfall of 101 mm, an excess of 110%. Except Nizamabad and Mahbubnagar districts, which received normal rainfall, all other districts received rains in excess this season. Inflows into irrigation projects and reservoirs such as Nagarjunasagar, Nizamsagar, Sriramsagar, Singur, Lower Manair and Velugodu have been less compared to last year. For instance, water level in Singur is at 1,690 feet compared to 1,705 ft last year. Similarly, the water level in Lower Manair this year is just 884 ft against 899 ft last year as on

date.

TSDISCOMs estimated the unrestricted peak demand to reach about 8,400 MW during the coming kharif season.

TSSPDCL to strengthen distribution network

As a part of strengthening distribution net work in its licensed area TSSPDCL is planning to erect 159 (33/11 kV) substations at a cost of Rs. 294 crore. TSSPDCL is also planning to shift high tension and low tension overhead lines in Hyderabad city at accost of Rs. 248.91 crore. These lines include 119 kilometers of 33 kV lines, 204 kilometers of 11 kV lines and 402 kilometers of LT lines.