

# **Power Sector in Andhra Pradesh and Telangana during January 2017**

## **POLICY**

### **Telangana joins UDAY**

The Telangana State Government and the Electricity Distribution companies in the state entered into a MoU with the central government under the Ujwal Discom Assurance Yojana (UDAY) Scheme. Under UDAY outstanding long term debt of DISCOMs as on 30<sup>th</sup> September 2015 will be rescheduled. While 75% of the debt will be taken over by the state government the remaining debt will be reissued on lower interest rates. The two DISCOMs in the State are burdened with long-term debt of Rs. 11,897 crore. The Telangana government will take over Rs. 8,923 crore of this debt. The remaining debt of Rs. 2,974 crore debt would be re-priced or issued as state-guaranteed discom bonds. The two State Discoms will have a interest burden relief of Rs. 890 crore per annum and they will be able to raise funds with competitive rates from the financial institutions towards capital expenditures.

The scheme will bring annual savings in interest payments to the tune of Rs. 387 crore to Telangana. The interest cost on future borrowings is also expected to reduce, providing a saving of around Rs. 30-40 crore. The reduction in Aggregate Technical and Commercial losses (AT&C) losses and transmission losses to 9.95 per cent and 3 per cent respectively, is expected to bring additional revenue of around Rs. 1,476 crore. Telangana is also expected to gain Rs. 1,200 crore through demand side interventions and around Rs. 2,250 crore on account of the support being extended by the Centre through various coal reform measures.

### **Solar pump sets in Telangana**

The Telangana New and Renewable Energy Development Corporation is planning to replace traditional agriculture pump sets with solar pump sets. The central government sanctioned 4,223 solar pump sets for Telangana. Out of these 90 pump sets were installed in Khammam district on pilot basis. These pump sets proved to be efficient to draw water from depths of more than 200 feet. The solar pump sets sanctioned by the central government were of 5 HP capacity while the actual capacity utilization at the ground level is more than this due to the depth of ground water. As the pilot project has given successful results in operation even at water depths of more than 200 feet it was decided to deploy the remaining allocated pumps.

## **GENERATION**

### **Tata Power commissions project in AP**

Tata Power Renewable Energy Ltd (TPREL), a wholly-owned subsidiary of Tata Power, has commissioned 36 MW wind capacity of a 100-MW wind farm under construction at Nimbagallu in Andhra Pradesh

### **Suzlon to set up 226.8 MW wind power project in AP**

Suzlon Group has bagged a 226.8 MW wind power project from a independent power producer (IPP), to be executed in Anantapur district, AP. The project covers 108 units of S111 90m tubular tower with rated capacity of 2.1 MW each. The project is scheduled to be completed by March 2017. Suzlon will be responsible for construction of the project as well as for operation and maintenance services for the first 10 years. The project is expected to reduce 0.48 million tonnes of CO2 emissions per annum.

### **AP to increase RE contribution**

The Andhra Pradesh Electricity Regulatory Commission (APERC) in its draft regulation proposed to increase the share of renewable energy in its electricity mix to 25.25% by March 2022. Indian regulations call for separate renewable purchase obligations for solar and non-solar technologies. For non-solar renewable energy technologies APERC has proposed a target of 12.50% by March 2022. The commission has also proposed to increase the solar power share from 4.75% in 2017-18 to 12.75% in 2021-22.

### **SunEdison sells solar projects to Greenko**

SunEdison Inc. is exiting its business in India by selling 1.7 GW of wind and solar farms to Greenko Energies Pvt. Ltd. Greenko took over SunEdison sites in September that include ones with 440 MW of capacity already operating and another 1,200 MW of projects still under development. The assets are valued at about \$500 million. SunEdison last year won the right to build 500 MW of solar power in Andhra Pradesh with a record low bid of Rs4.63 kilowatt-hour. That project will now be completed by Greenko by 31 March at a cost of about Rs2,500 crore.

### **Suzlon bags 105 MW order**

Suzlon Group has won orders for 105 MW wind power project from Hyderabad-based Axis Energy Group. Axis Energy Ventures India Pvt Ltd is the flagship company of the Axis Energy Group and the project is being undertaken by a special purpose vehicle Axis Wind Farms (Anantapur) Pvt Ltd. The project consists of 50 units of S111 90m tubular tower with rated capacity of 2.1 mw. Project is located in Anantapur district of AP. The project will be completed in two phases. The first phase will be completed in March and the second phase will be completed in June.

Suzlon as part of the Supply and Installation Agreement will be responsible for operation and maintenance services with lifecycle asset management services for 10 years. The project is reported to have the potential to reduce 0.22 million tonnes of CO2 emissions per annum.

## **FUEL**

### **ONGC to invest \$5.1 bn for developing gas and oil finds off AP coast**

ONGC signed an MoU with Andhra Pradesh government for investing USD 5.07 billion in developing oil and gas finds off the state's coast by 2019-20. First gas production is envisaged by June 2019 and oil would start flowing from March 2020.

The investment will bring to production 10 oil and gas discoveries in the Bay of Bengal block KG-DWN-98/2 (KG-D5). The 7,294.6 sq km deep-sea KG-D5 block has been categorised into Northern Discovery Area (NDA - 3,800.6 sq km) and Southern Discovery Area (SDA - 3,494 sq km). The NDA has 11 oil and gas discoveries while SDA has the nation's only ultra-deep sea gas find of UD-1. These finds have been clubbed in three groups - Cluster-1, Cluster-II and Cluster-III. Gas discovery in Cluster-I is to be tied with finds in neighbouring G-4 block for production. From Cluster-II a peak oil output of 77,305 barrels per day is envisaged within two years of start of production. Gas output is slated to peak to 16.56 million standard cubic meters per day by end-2021.

### **GSPC boost for ONGC capacity**

State-run ONGC has struck a deal with GSPC to buy entire 80% stake in the Deen Dayal gas fields in the Bay of Bengal for .2 billion. ONGC expects to use the infrastructure of the former to produce additional 3 million metric standard cubic meter per day (MMSCMD) of gas from its own fields as it has a lot of spare capacity. These resources would not have been otherwise exploited.

ONGC feels the GSPC deal fits its overall strategy. ONGC has discovered fields adjacent to the GSPC fields and it has spent a lot to develop knowledge in this area which is relatively new.

That learning will be available and it has created huge infrastructure. GSPC has made nine discoveries in the Bay of Bengal block of which three have been approved for development.

### **ONGC's KG gas output to touch peak in July**

ONGC expects to reach peak output of about 5 million standard cubic meters per day (mmscmd) from its Vashishta and S1 gas fields in KG Basin by July this year, from 1.1 mmscmd at present.

The fields were developed under a greenfield deep water development project at an investment of USD 751.65 million. The Vashishta field is estimated to produce 9.56 billion cubic metres (bcm) over a period of nine years with peak production reaching 3.55 mmscmd during the first five years. The S1 field is expected to deliver 6.22 bcm over a period of eight years with a peak production of 2.2 mmscmd for the first five years.

As part of the Vashishta and S1 field development, ONGC is drilling four wells. The Vashishta field lies in water depths varying between 500 meters and 700 meters and about between 31-35 km from the Amalapuram coast. The S1 field is located in water depths of between 250 meters and 600 meters, and approximately between 26-29 km from the Amalapuram coast. While the Vashishta field is a free gas field with estimated reserves of 12.92 bcm, the S1 field lies to the east of G-1 field and is a free gas field with estimated reserves of 10.37 bcm.

Vashishta is the first field in the country to get the premium price of gas. The premium price for period between October 2016 and March 2017 was cut to USD 5.3 per mmBtu based on benchmark rates in gas surplus economies. The rate for regular gas price also declined to USD 2.50 per mmBtu.

### **US firm puts gas reserves in Deen Dayal West field at about 1trillion cubic feet**

While ONGC said the acquisition of operatorship rights in the block “fits well with the strategy of ONGC to enhance natural gas production from domestic fields” at a faster pace, there are indications that the field was not a viable option.

ONGC hired Ryder Scott Petroleum Consultants, a Houston-based reservoir evaluation firm to certify the hydrocarbons present and recoverable in the KG-OSN-2001/3 block. Ryder Scott in its report submitted in November, placed the gas reserves in the Deen Dayal West field at about 1 trillion cubic feet (tcf). GSPC initially told that gas reserves were around 14 tcf, and then brought it down to around 7 tcf. The present indication is that around 1 tcf of gas present in KG-OSN-2001/3 block.

Added to this the gas may not be easy to recover as it is a difficult field, with extremely high temperature and pressure. Ryder Scott has also projected a gas recovery rate of about 19 per cent, against ONGC's estimate of about 24 per cent.

### **ONGC gets price guarantee from GSPC in KG basin deal**

GSPC will buy entire output at a predetermined price from the KG Basin gas field that it has agreed to sell to ONGC. The initial understanding was that GSPC will support a particular price for five years as it has enough capacity in the system to absorb the gas from that field. The agreement is reported to have provided for GSPC buying gas for the field's lifetime at a price linked to forward prices, which are available for next five years. The forward prices for the fifth year have been taken for the remaining life of the field. The government publishes the maximum price producers can charge for gas from difficult fields such as Deen Dayal West twice a year. If government prices were to slide below the forward prices, GSPC will compensate ONGC for the deficit.

### **Singareni shows increased coal output**

SCCL proposed to expand and strengthen Singareni by opening 20 more open cast and 11 underground mines over the next five years and take capacity to 900 lakh tonnes a year. This will generate additional employment for 11,600 people. Singareni currently operates 46 mines, 30 of them underground and 16 open cast mines with about 56,866 workers. The company is expanding to other states and started operations in the block allocated by the Centre at Naini mines in Odisha.

While Singareni earned about Rs. 400 crore on an average per year, during 2015-16 it earned Rs. 1,066 crore, enabling the company to share 23 per cent of the profit with workers who were handed over Rs. 1 lakh to Rs. 1.25 lakh as bonus.

SCCL recorded output of 59.84 lakh tonnes of output during December, as against the targeted output of 52.70 lakh tonnes, registering an 18 per cent increase. During December 2015 it produced 57.40 lakh tonnes. Coal despatch was up at 59.84 during December 2016, up against 54.42 lakh tonnes in December 2015. The Collieries registered a strong growth of 15 per cent a year as against 3 per cent earlier.

## **DISTRIBUTION**

### **AP offers competitive tariff to Railways**

In an attempt to retain Indian Railways as a customer, the state government of Andhra Pradesh had offered to supply power to the national transporter at competitive rates.

“The idea is to retain railways as a customer. We are in talks with them. Our reasons stem from the fact that we have already laid out the transmission network for them and want to use that infrastructure. Also, we are a power-surplus state. Given, the Railways focus on electrification, their demand will go up, which we will be more than happy to cater (to),” said Ajay Jain, Andhra Pradesh’s energy secretary.

The negotiations are underway with Andhra Pradesh offering a price of Rs5 per unit, and the Railways demanding a tariff of Rs4.71 per unit.

### **EESL to invest Rs 24,700 crore for energy conservation in Andhra Pradesh**

Energy Efficiency Services Limited (EESL), a company under the Ministry of Power, has signed multiple MoUs with the government of AP at the Partnership Summit entailing investment of Rs 24,700 crore for energy efficiency and solar projects in the state. The execution of the projects will help the state reduce consumption of power and add over 80,000 jobs in the state.

The EESL will distribute energy-efficient domestic appliances like LED bulbs and tube lights and 5-star rated fans under the 'Unnat Jeevan by Affordable LEDs and Appliances for All (UJALA) scheme.

The EESL will also install a 50,000 Solar Photo-Voltaic (PV) grid connected to agricultural pump sets in each DISCOM area. The irrigation needs are intermittent, between 200 to 250 days in a year, leaving most of the days with additional power available. Solar PV grid- connected pump sets will bridge the gap and the surplus power may be fed back to the grid.

Other projects include conversion of 500 government-owned buildings into energy-efficient buildings over three years; installation and maintenance of energy efficient LED street lights in 1000 gram panchayats over 10 years; and replacement of over 10 lakh inefficient agricultural pump sets with energy efficient ones in three years.

### **AP CM tells officials to expedite rural LED lighting plan,**

Chief Minister of AP directed the senior officials of panchayat raj and energy departments to prepare a time-bound action plan to retrofit all existing conventional street lights with LED street lighting systems. He said the entire project must be completed by end of 2017. The LED street lighting scheme would reduce the monthly electricity consumption of panchayats by around 50 per cent, apart from relieving the burden of operations and maintenance of the lights for 10 years.

## **Telangana DISCOMs yet to table tariff proposals**

Telangana electricity distribution companies have sought more time to submit new power tariff hike proposals for the next financial year. This would be the third time that power DISCOMs have sought extension of time for submitting tariff hike proposals. The two distribution companies, NPDCL and SPDCL, sought extension of time till January 26 to finalise the tariff proposals.

## **Rise in power demand: Telangana**

In Telangana daily power consumption crossed 8,240 MW. The Rabi season crops have added to the steep increase in daily demand. The Telangana Transco is expecting the power consumption to touch 10,000 MW in the coming months.

## **Municipalities in Telangana to switch over to LED street lights**

Municipalities in Telangana have signed MoU with EESL to replace existing street lights with LED street lights. 30 municipalities have agreed to go for LEDs and 18 more are in the pipeline. Municipalities need not spend on replacing the current lights. Operation and maintenance of LED lights will be the responsibility of EESL for seven years. They will monetize energy savings. Replacement of conventional lights with LEDs will reduce energy consumption by 50%.