

# **Power Sector in Andhra Pradesh and Telangana during December, 2016**

## **POLICY**

### **Telangana aims top place in solar power**

Replying to a question in the Legislative Assembly power minister of Telangana said that Telangana is producing 1,000 MW solar power at present and tenders have been floated for another 2,000 MW solar power generation. According to him Telangana currently stands at second rank in solar power production in the country and it may reach the top spot in another six months. The state government also initiated steps to give solar power to farming community.

### **Centre to provide Rs 9,000 crore to Andhra Pradesh energy sector**

The Central government has promised to release about Rs 9,000 crore for strengthening the energy sector. The Centre has proposed to implement the dual action plan in the state where the infrastructure development schemes in urban and rural areas will be taken up separately. The LED street-lighting programme implemented in urban local bodies will be extended to rural local bodies. Rural LED programme would save around 3,000 million units of power which is equal to generation of 1,000 MW annually. The Centre had agreed to spend around Rs 6,000 crore to replace about 17 lakh agriculture pump sets in the state.

## **GENERATION**

### **Azure Power wins bid for 50 MW solar project in AP**

Azure Power won a 50 MW solar power project under the National Solar Mission Phase II Batch III through recent auction by Solar Energy Corporation of India (SECI). Azure secured 50 MW of the total 100 MW capacity auctioned. The project will come up in the Ananthapuramu Solar Park developed by SECI and Andhra Pradesh Solar Power Corporation Ltd. The project tariff is Rs. 4.43 per kWh with an additional support of Rs. 12.7 million per MW from the Centre via viability gap funding.

### **Ganges International to set up solar power plant at Tirumala**

Ganges Internationale Pvt Ltd (GIPL) has won a project to set up 10 MW solar mounting structures and tracking systems for Tirupati Tirumala Devasthanams at Tirumala in Andhra

Pradesh. GIPL structures have been chosen by the developer to implement the solar project and thereby bring down its expenditure towards power consumption.

### **AP and Telangana among top 10 in solar power**

According to a report Andhra Pradesh and Telangana are among the ten states that account for around 90 per cent of all solar installations and pipeline in the country.

Andhra Pradesh has solar projects with total capacity of 1,009 MW in operation and 1,494 MW under development. Telangana has solar projects with total capacity of 1,006 MW in operation and 2,418 MW under development.

### **Azure Power started construction of NTPC project in AP**

Azure Power started construction of 100-megawatt (MW) solar power plant in Andhra Pradesh. This is coming up at National Solar Mission for 1000 MW of solar power projects at Kurnool Ultra Mega Solar Park. The tariff on the project has been fixed at Rs. 5.12/ kWh and the company will supply power to NTPC for 25 years. The renewable energy project is expected to be commissioned by second quarter 2017.

### **Singareni Collieries' second unit declares commercial operation**

Singareni Collieries Company Ltd's thermal power plant's second unit of 600 MW located at Jaipur in Adilabad district of Telangana started commercial operations on 2<sup>nd</sup> December 2016.

### **Bhadradi Thermal Power Plant gets permission from Centre**

The Union Ministry of Power issued clearance to Bhadradi Thermal Power Plant (1,080 MW) coming up at Manuguru in Kothagudem district in Telangana. The Central ministry stated that it had no objection for the establishment of this plant with sub-critical technology subject to its completion by December 2017. Out of estimated cost of Rs. 7,300 crore about Rs. 1,020 crore has already been spent on this plant.

## **FUEL**

### **ONGC to pay GSPC \$1.2 billion for assets in KG Basin**

ONGC will pay \$1.2 billion to Gujarat State Petroleum Corp's (GSPC) 80% stake in the Deen Dayal West field and six other finds in the KG Basin. Jubilant and Geo Global Resources have 10% each in the field. ONGC will acquire the participating interest of GSPC

along with the operatorship in the Deen Dayal West field for \$995.26 million. ONGC would also pay GSPC \$200 million towards future consideration for six discoveries other than Deen Dayal West Field, which will be adjusted against the valuation of these discoveries after the approval of their field development plans. ONGC claimed that the acquisition would act as a pivot to develop other fields in the region using the infrastructure already built by GSPC. GSPC has spent \$3 billion to develop the field but hasn't been able to start commercial production. GSPC's stake in the KG block and future income from the block is reported to be hypothecated to lenders. The Comptroller and Auditor General (CAG) had criticised GSPC this year for the way it handled the block. The investments in the block drove up GSPC's debt 180% in four years to Rs 19,700 crore by March 2015.

There are doubts about ONGC's acquisition of GSPC's assets in KG basin. One of the sources of doubt is CAG's scepticism over the techno-commercial viability of GSPC's assets. There are questions about ONGC's expertise to ramp up gas production at the acquired wells. Production at GSPC's field started in August 2014, but it is not substantial enough to be commercially viable. The project is delayed by almost four years owing to unsolved technical issues. According to the field development plan, cost of development was estimated at \$2.75 billion, but GSPC spent \$2.83 billion until March 2015. Also, it incurred exploration cost of \$584 million. This takes the total investment in the field to about \$3.41 billion. GSPC has been able to complete only three development wells out of the proposed 15. Continued uncertainty for production, along with time and cost overruns, could put to risk the economic viability of the project even at the government's approved ceiling price for difficult fields.

### **GS Singhvi to be Govt nominee in RIL and ONGC arbitration**

The GoI nominated retired judge of the Supreme Court G.S. Singhvi to the Committee to arbitrate a dispute between RIL and ONGC. Reliance has appointed Bernard Eder, a former high court judge in the United Kingdom, to the Committee. The two arbitrators will now decide on a third member, following which the hearings will begin. The Committee will decide if the company needed to pay up \$1.55 billion for producing gas that belonged to fields operated by state-run ONGC.

### **ONGC yet to get green signal from DGH for \$5 bn KG-D5 gas development plan**

ONGC is awaiting approval of the Directorate General of Hydrocarbons (DGH) to commence investing \$5.07 billion in bringing to production oil and gas discoveries in its KG-D5 block. About a year back ONGC submitted a field development plan (FDP) to the DGH for bringing to production 10 oil and gas discoveries in KG basin block KG-DWN-98/2 (KG-D5). DGH so far has not approved the FDP. Without waiting for the approval, tendering for long-lead items has started to ensure the 2019-20 schedule for starting production is not missed. The board of ONGC had on March 28 approved an investment of \$5,076.37 million for developing Cluster-II discoveries to flow natural gas from June 2019 and oil by March 2020.

## **Villages around Tummalapalle uranium mines face water and soil pollution**

The quality of water in surrounding villages of Tummalapalle uranium mines in Kadapa district has deteriorated with high levels of heavy and trace metals. Wind and rain are found to be responsible for the spread of the contamination from the mining area to other localities in the region. Tummalapalle uranium mine is spread over five sq km. Wind erosion and rainwater runoff in the uranium mining area may spreading contaminants.

Researchers from Jawaharlal Nehru Technological University-Anantapur and its affiliated JNTUA College of Engineering at Pulivendula, analysed samples of water and soil collected from Mabbuchintalapalle, Tummalapalle, Rajakuntapalle, Bhomaiahgaripalle, and V Kota villages to find out the extent of deterioration. They detected heavy and trace metals like barium, cobalt, chromium, copper, molybdenum, nickel, lead, rubidium, strontium, vanadium, yttrium, zinc, and zirconium. Only nickel, strontium, zinc, zirconium, and rubidium were within the permissible limit, while other elements crossed the maximum limit. The increased levels of barium, arsenic, cobalt, chromium, copper, molybdenum, lead, vanadium and yttrium are a major concern for the suitability in agricultural and other land management practices. Heavy metals if consumed in large quantities may lead to severe health issues, including cancers, respiratory and kidney complications.

Researchers suggest that the state government should immediately initiate remedial measures to prevent further deterioration of the environment. Over exploitation of groundwater has also affected the quality of water and soil. Experts call for regular soil and water analysis to keep a tab on their quality. Soil excavation and replant will reduce the level of pollutants.

## **DISTRIBUTION**

### **AP and Telangana DISCOMs submitted ARR**

AP and Telangana DISCOMs submitted Aggregate Revenue Requirement (ARR) for the financial year 2017-18. They have yet to submit tariff proposals for the coming FY.

APDISCOMs projected revenue deficit to the tune of Rs. 7,177 crore for the FY 2017-18. While ARR will be Rs. 30,069 crore revenue from tariff and non-tariff income will be Rs. 22,892 crore. While cost of service will be Rs. 5.94 per unit revenue realisation will be Rs. 4.53 per unit leaving a revenue gap of Rs. 1.42 per unit. Increase in quantum of power purchased from renewable sources and higher fixed cost burden due to undespached, surplus energy are important reasons for this deficit. 67,948 mu of electricity will be available during the coming FY while requirement is pegged at 57,018 mu leaving a surplus of 10,930 mu. Out of this surplus power 2,208 mu will be sold in the open market. The DISCOMs projected 10.35 percent increase in power demand in the coming year.

The Telangana DISCOMs projected ARR of Rs. 31,930 crore for the FY 2017-18. Total power requirement is pegged at 46,710 mu and power purchase cost of Rs. 24,421 crore.

These DISCOMs did not indicate the quantum of deficit and new tariff proposals. They want to finalise these once they get a clear picture of support under UDAY scheme.

## **GENERAL**

### **APDISCOM files 203 electricity cases**

Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL) filed 203 cases by inspecting 432 suspicious electricity services in Jagampeta, Amalapuram, Mandapeta and Prathipadu in East Godavari district circle. Among them 105 cases were related to additional load, 43 direct tapping, 10 malpractice and 43 to back billing. Over all an amount of Rs 61.34 lakh was imposed as fine on the defaulters.

### **AP eastern DISCOM bags top spot in energy conservation in India**

While the AP Energy Conservation Mission secured the national best award, the Eastern Power Distribution Company Limited (EPDCL) bagged the first prize in DISCOM category. EPDCL bagged the top spot in energy conservation among all 44 distribution companies in the country. EPDCL has been able to save nearly 626.18 MU of power since the introduction of energy conservation schemes from 2015-16 fiscal. It plans to achieve savings of more than 1,000 MU from the next year.

Distribution of 79.20 lakh LED bulbs to 39.60 lakh consumers in five districts of Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari helped us save energy up to 644.10 MU from February 2015 to November 2016. Added to this, the DISCOM saved nearly 0.88 MU by distributing 38,730 five-star rated fans to its consumers in Narsapuram in West Godavari district on a pilot basis. By installing 1,93,540 LED street lights in five districts, the DISCOM saved 25.35 MU of power in a year.

Under the Rooftop Solar Net Metering programme APEPDCL saved 7,78,320 units of power per month by synchronising 5.405MW of power to the AP Grid. The DISCOM also saved 20.65 MU by installing 2,978 solar agriculture pump sets.

### **Power bill of Kaleshwaram LI project to cost government Rs 8,000 crore**

A study by three independent experts Biksham Gujja, Shiv Kumar and Raghu Kancharla on Kaleshwaram Lift Irrigation Project (KLIP) found that to irrigate 18.19 lakh acres in seven districts when all its components are completed electricity costing between Rs. 7,903 crore and Rs. 13,172 crore a year will be required. This amounts to Rs. 43,449 to Rs.72,416 per acre per year. 12,349 mu electricity will be required for a single crop season with 0 per cent distribution loss and 20,582 million units at 40per cent losses. Without any distribution loss the electricity cost works out to Rs. 7,903 crore and with 40per cent losses will be Rs 13,172 crore per year.

According to the study, after completion of the project, the state will be burdened with electricity subsidy of more than Rs. 10,000 crore. Until now the state government never paid more than Rs. 3,000 crore as electricity subsidy to agriculture and it would be next to impossible for any state to take up such a huge expenditure every year.

The study preferred to locate the lift scheme at Tummidihatti instead of Medigadda as proposed under the KLIP scheme. According to this study for lifting the same quantity of water (180 TMC) from Medigadda as compared to Tummidihatti, an additional cost of Rs 1253 crores every year is to be incurred towards electricity supply. This is in addition to the additional investments required for construction of barrages and pumping stations at Medigadda, Annaram and Sundilla.