

## KERALA STATE ELECTRICITY BOARD LIMITED

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## Abstract

Long term procurement of power due to increase in power demand and non-scheduling of generators of existing long term DBFOO contract -Sanctioned- Orders issued

Corporate Office (Commercial and Tariff)

BO (FTD) No. 96 /2024 (No. CE(C&T)/ Long term power procurement /2023-24) Tvpm, dtd 04.03.2024

Read: (1) KSERC orders dt 10/5/2023 and 29/12/2023

- (2) PSAs Executed by KSEBL with M/s Jindal power Ltd, M/s Balco, M/s Jhabua Ltd and M/s Jindal India Thermal Power Ltd.
- (3) Letter no. CESO/AEELD1/LD Operation/2023-24/2504 dt 29/02/2024 of the Chief Engineer (Transmission System Operation)
- (4) Note no. CE(C&T)/ Long term power procurement /2023-24 dt 4/3/2024 of the Chief Engineer (Commercial & tariff) to the full time Directors (Agenda No.08-03/2024)

## ORDER

The State of Kerala is facing a critical power situation as the 2023 South West (SW) monsoon in Kerala was one of the worst in 50 years, with a 34% rainfall deficit. IMD, in its long-range forecast of monsoon, 2023 had predicted a normal monsoon for the country with southern peninsula to receive above normal rainfall. Contrary to this, the strong El-Nino event during the year had affected the outcome of SW Monsoon in Kerala as the deficit was nearly 40% at the end of the season on 30<sup>th</sup> September. Though the State received normal North East Monsoon, it was not sufficient enough to compensate the poor SW Monsoon. Further, the power consumption registered unusual growth compared to previous year in all the months and the overall consumption registered a growth of more than 10%. Cumulative impact of poor inflow in reservoirs and increase in consumption was more than 2800MU.

This critical power situation in this state was aggravated by several reasons of which the main cause is attributed to the non-implementation of 465 MW Long term Power Supply Contracts (DBFOO) by generators despite the State Regulatory Commission having approved the power purchase in pursuance to the Section 108 directive issued by the Kerala Government. Though the generators were requested to take steps immediately for resuming the scheduling of power to KSEBL in terms of the PSA and the KSERC order dt 29/12/2023 read as 1<sup>st</sup> above, none of these generators have started scheduling power.

The gap created due to non-scheduling of this 465MW by these generators have affected the power position of the state very badly. In order to tide over the absence of this quantum of power, market purchase had to be done at higher rates along with the increased hydel utilisation of our state. Though KSEBL had floated tender for procuring 500 MW power for five years through medium term tender from suppliers with ensured domestic coal, the tender had to be cancelled later on due to exorbitant rates quoted. To mitigate the acute shortage, KSEB entered in to short-term contracts for 250 MW from August 2023 to May 2024, albeit at higher rates than DBFOO contracts, which has provided some relief amidst the crisis. Thus, the power position of the state is very critical at present and it has a cascading effect on the financial position of KSEBL. Also, the availability of power in the market is very meagre. A situation has reached that in order to draw a balance between power purchase and financial position, KSEBL will have to resort to power cuts to avoid exorbitant tariff increase to consumers.

Anticipating scorching summer in April 2024 and May 2024, KSEB had explored possibility of having Long Duration Contracts (LDC) / Monthly contracts of exchange market for power procurement. Thus 300 MW was additionally contracted for March, 2024, 326 MW to 451 MW in April and 547 MW in May. The average landed cost of power at Kerala Periphery will be ₹9.37/unit, including the transmission charge; but the shortage/deficit is still huge. It is expected that peak demand during the summer months will touch 4800 MW, 5371 MW and 5281 MW from March to May, respectively whereas the availability will be hovering around 4575, 4650 and 4650 MW. Since there is limited opportunity, KSEBL will be constrained to meet the balance quantum from the market. Considering the precedence of price hike in market, this year also some hike is to be expected. The price is likely to be touching the capping (₹10.00) during peak hours. Moreover, since High Price market also is now in place, some of the generators may offer power only in that market. Further, no tie ups have been concluded for the month of June 2023 which has to be anticipated if the summer gets extended.

In this circumstance, KSEBL needs to ensure sufficient funds for procuring power from market even at higher rates. The amount required for pay out for power procurement for monthly contracts and other power exchange transaction alone will come to Rs. 1400 to Rs. 1500 crore. This is over and above the normal monthly payouts averaging ₹1000 Crore/month

to Central Generating Stations (CGS) and Independent Power Producers (IPPs) with whom KSEBL has entered in to firm contracts.

Moreover, since electricity demand is relatively low during day time due to solar injection and energy cannot be stored, KSEBL has to absorb the excess energy injected by the prosumers by surrendering its already tied up power by incurring fixed charges. Since the prosumer has to be given back the banked energy during peak hours, KSEBL is forced to purchase power from the market at an average price of ₹9. This increased consumption along with low revenue, has affected the financial stability of KSEBL as subsidies are given for low end consumers. Hence, in order to have a balance between power purchase and financial position, KSEBL will have to explore options for firm RTC power where a reasonable rate can be expected if the purchase is for a long term.

In view of the above, a Load Generation Balance (LGB) has been prepared as per letter read as 3<sup>rd</sup> above by the Chief Engineer (Transmission System Operation) considering the upcoming new stations like Talabira thermal power station (400 MW), Pallivasal Extn (60MW), Thottiyar (40 MW) etc (LGB attached). 10% hike in internal RE capacity has also been additionally factored. The average demand growth considered is 5% which can vary due to growth in industries, EV penetration and so many other factors. Considering the uncertainty in the old thermal plants (Central Generating Stations- CGS) and the expired/duly expiring Power Purchase Agreements of various CGS, the best option considered is to go for a long term procurement of 500MW for 15 years considering the deficit in the present situation as an immediate solution for this critical issue.

Moreover, as per the guidelines for the Resource Adequacy Planning Framework for India brought out by Ministry of Power, Govt of India in June 2023, in consultation with Central Electricity Authority (CEA), the share of long-term contracts in a state is suggested to be in the range of 75-80% of the total supply side Resource Adequacy Requirement (RAR), or as specified by the respective State Electricity Regulatory Commission. The medium-term contracts are suggested to be in the range of 10%-20% of the total supply side RAR while the rest can be met through short-term contracts. This points out to the requirement of going onto long term power procurement which is reasonable.

Ministry of Power (MoP) vide letter dated 19.07.2017 had designated Power Finance Corporation (PFC) as an agency to aggregate power requirement of group of States for undertaking tariff based competitive bidding for long and medium term procurement of

power. MoP has entrusted PFC as a nodal agency for various procurement of power through DEEP E-Bidding portal. As our experience of conducting long term procurement of power on DBFOO basis during 2014 has resulted in various issues and litigation citing deviation in standard bidding procedures, the matter was placed before the Full Time Directors as per the note read as 4<sup>th</sup> above.

Having examined the above matter in detail, the Full Time Directors have resolved

- to proceed with long term power procurement of 500MW RTC power for 15 years as an immediate solution for the critical power position of Kerala State consequent to the non-scheduling of the DBFOO generators in spite of the approval of KSERC and the severe monsoon deficit.
- to avail the service of MoP authorized Central PSU ie, Power Finance Corporation as
   Transaction Advisor of KSEBL for this long term power procurement for the best
   interest of our state.
- 3) To take up with the Secretary, Power, Kerala state for an in principle approval of the same

## Orders are issued accordingly

By Order of the Full time Directors,

Sd/-LEKHA G. Company Secretary

To

- 1. The Chief Engineer (Commercial & Tariff)
- 2. The Chief Engineer (Trans & SO)

Copy to:

- 1. The Financial Advisor/Chief Internal Auditor/LA & DEO
- TA to CMD/ Director (T& SO and Plg)/ (Dist,Safety , SCM & IT)/ Gen (Civil)/ Generation-Electical,REES, SOURA, Sports & Welfare)
- 3. PA to Director (Finance & HRM)
- 4. Senior CA to Secretary (Admin)/Company Secretary
- Library / Stock File.

Forwarded by Order

Executive Engineer