



KERALA STATE ELECTRICITY BOARD LIMITED
(Incorporated under the Indian Companies Act, 1956)

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To

Sri. Pardeep Jindal
Chief Engineer
Power System planning & Appraisal II Division
Central Electricity Authority
Sewa Bhavan, R.K. Puram
New Delhi 110066

Sub: 40th Standing Committee on PSP meting – request to include additional agenda item for discussion - reg:-

Sir,

The following item may please be included in the agenda for the 40th Standing committee meeting to be held on 19th November, 2016 at Hyderabad.

400kV Substation Areekode (Kozhikode) was commissioned on 15.10.2015 with two numbers 315MVA 400/220kV Interconnecting Transformers (ICTs). But post commissioning and loading of the ICTs it was observed that, during tied operation of the grid, the ICTs are getting overloaded and to control the load, split bus operation is adopted at 220kV level in Northern Kerala. This has resulted in low voltage scenario at many stations in the North region and under utilization of the newly commissioned 400kV transmission system. To address this issue KSEBL had requested CEA that the existing 2 X 315MVA 400/220kV transformers be replaced with 2 X 500MVA 400/220kV transformers or an additional 315MVA 400/220kV transformer be installed at the 400kV substation, Areekode in addition to the existing 2 X 315MVA 400/220kV transformers. It may be noted that, land for additional transformer bay is already available at Areekode substation.

With the proposed capacity enhancement at 400kV Areekode substation, the power situation in Northern Kerala will improve considerably and this will enhance

the supply reliability and operational easiness in the transmission network. Further the import capability of the State will also get enhanced by virtue of the removal of the constraints experienced in evacuating power from the 400kV node at Areekode.

Subsequent to the above, during discussions in the 39th Standing Committee Meeting on Power System Planning (SCPSP-SR) held on 28th December 2015, **PGCIL has suggested for carrying out capacity enhancement at 400kV Substation Areekode by addition of 1x500MVA transformer** and the same was approved. During the meeting, considering the urgent requirement for meeting the load in the Northern Kerala, KSEBL had requested PGCIL to take necessary steps to provide the **additional ICT at 400kV Substation, Kozhikode temporarily by using a spare 315MVA ICT till 500MVA ICT is available**. CTU had agreed to look into the matter. The matter was taken up in the 29th SRPC meeting held on 4th and 5th March 2016 wherein TANTRANSCO had informed that they would be returning back the spare ICT of PGCIL being utilized at 400kV Substation Sriperumbudur. ED, SR-II PGCIL had indicated that the ICT being released could be utilized at Areekode (Kozhikode). He had further suggested that the additional bay works at Areekode can be taken up so as to match with the availability of ICT.

Now PGCIL had communicated to KSEBL that the transformer with accessories and oil are to be dispatched from TANTRANSCO substation at Sriperumbudur to Areekode (Kozhikode) and the same is to be erected and commissioned on temporary basis at Areekode (Kozhikode) before 500MVA (ICT#3) is commissioned. The scope of work includes packing, loading, transportation, unloading of 315MVA transformer from Sriperumbudur to Kozhikode, supply, erection and commissioning of equipment on temporary basis by connecting parallel to existing ICT No. 2 and using the 400 and 220kV circuit breakers for both ICT No. 2 and temporary ICT and Emergency Restoration System (ERS) works for making temporary connection between 400 and 220kV side of transformer, civil works including foundations for the transformer, isolator, Lightning Arrestor, Bus Post Insulator, earthing etc, deputation charges for manpower and hiring charges for major tools and plants, testing instruments and dismantling of all equipments including ERS system. The expected completion period for the works is minimum three months from the date of release of transformer by TANTRANSCO and KSEB consent for bearing the expenditure for the proposed work. Meanwhile KSEBL has

conveyed to PGCIL its agreement for bearing the expenditure for the above work and had requested them to expedite the work.

M/s PGCIL has further mentioned that the scheme proposed temporarily for connecting the third transformer is not standard and conventional and had requested KSEBL to co-ordinate with M/s PGCIL for obtaining CEA clearance for the same. A sketch of the scheme provided by M/s PGCIL is attached as Annexure.

In this context it may please be noted that consequent to the severe drought condition existing in the State, it will be highly depended on the power purchased from outside during the current summer period. Hence the availability of the third transformer by this period is very essential for maintaining supply in the State.

Considering the above facts in tandem with the present constraints and insecurity in the power supply to the Northern Kerala and the under utilization of the 400kV System at Areekode (Kozhikode) along with the improvement in Grid management and flexibility in the operations it is requested that sanction may kindly be accorded for the temporary installation of 3rd 315 MVA 400/220kV Transformer at 400kV Substation Areekode (Kozhikode), as per the above scheme to be implemented by PGCIL, so that they can go ahead with the same at the earliest.

Sd/-

Director

(Transmission & System Operation)