



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

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ABSTRACT

Augmentation of Transformer Capacity at 400kV substation Kochi with addition of 1x500MVA, 400/220kV ICT by PGCIL - SRPC (TP) recommendation –Management approval– ratification - Orders issued.

Corporate Office (SBU-T)

BO(FTD) No. 411/2021/D(T&SO)/PSE/SRPCTP/2020-21, Thiruvananthapuram dated 01.06.2021

- Read: 1. Note no. D(T&SO)/PSE/SRPCTP/2020-21 dtd.07.01.2021 of the Director (Transmission and System Operation).
2. Letter No.CESO/LD1/SRPC/2020-21/2494 dtd. 15.01.2021 of the CE (TSO) addressed to Member Secretary, SRPC, Bangalore.
3. Note no. D(T&SO)/PSE/SRPCTP/2020-21/81 Dated 14.05.2021 of the Director (Transmission and System Operation) (Agenda No. 46/05/21)

ORDER

In connection with the commissioning of +/- 320kV VSC, HVDC Pugalur - Trichur line and its effect on Kerala Transfer Capability, a meeting involving SRPC, SRLDC and KSEBL System Study Group was held on 15.09.2020. In the meeting SRLDC stated that with the proposed commissioning of HVDC Pugalur - Trichur line, the limiting constraint on Kerala import capability will be the (N-1) contingency of the ICTs at 400kV substation, Kochi. Hence to maximize the transfer capability after HVDC commissioning, augmentation of ICT capacity at Kochi 400kV substation is essential. KSEBL had stated in that meeting that with the present load profile of the State, the power flow through Pugalur - Trichur HVDC will result in corresponding reduction in power flow through other interstate feeders from Udumalpet, Thirunelveli and Mysore 400kV substations to Kerala. Further, the 400kV Kottayam substation of KSEBL is expected to be commissioned by the first quarter of 2022, which will relieve the loadings on Kochi ICTs to a great extent. However it was observed from the study that even after commissioning of Kottayam 400kV substation, the limiting constraint on import to Kerala would be the (N-1) contingency of ICT at Kochi leading to overloading of the second ICT.

In view of the above, the Southern Regional Power Committee (Transmission Planning) recommended augmentation of ICT capacity at 400kV Kochi substation on urgent basis.

Accordingly, the matter was discussed in the 2nd meeting of SRPCTP held on 01.10.2020. In the meeting CTU informed that with the commissioning of Tirunelveli - Kochi 400kV DC line, loadings on 2x315MVA, 400/220kV ICTS at Kochi substation has increased significantly. Presently both ICTs are loaded to about 80-90% of their transformation capacity and are not complying N-1 criteria. CTU proposed augmentation of transformation capacity by 1x500MVA, 400/220kV ICT at Kochi substation on an urgent basis. KSEBL agreed to the proposal subject to management approval. The matter was further deliberated in the 38th TCC and SRPC meetings also. It was pointed out that augmentation of the transformer capacity at 400kV substation, Kochi is essential for catering to future loads. The transformer, after approval, will take about 18-24 months for commissioning.

The Chairman and Managing Director has given concurrence in the note read 1 above to intimate SRPC regarding the approval of KSEBL and directed to seek ratification from the Board for that action. Based on that the Chief Engineer (Transmission System Operation) had intimated SRPC as per letter read 2 above, the approval of KSEBL to the recommendation of SRPCTP for augmenting the ICT capacity at 400kV Substation Kochi by PGCIL as Regional System Strengthening Scheme.

The matter was placed as per note read as 3rd above before the Full Time Directors.

Having considered the matter in detail, the Full Time Directors in its meeting held on 21.05.2021 resolved to ratify the action of Chief Engineer (Transmission System Operation) intimating SRPC the approval of KSEBL to the recommendation of SRPCTP for augmenting the ICT capacity at 400kV Substation, Kochi by PGCIL as Regional System Strengthening Scheme.

Orders are issued accordingly.

By order of the Full Time Directors

Sd/-

Lekha. G

Company Secretary (In-Charge)

To

The Chief Engineer,
Transmission System Operation

Copy to:

The Financial Adviser/ The Chief Internal Auditor.
The Deputy Chief Engineer (IT)
T.A to Director (T&SO)
Company Secretary
Fair Copy Superintendent/Library/Stock File

Forwarded / By Order



Assistant Executive Engineer