## JUSTIFICATION REPORT

The work of upgradation of existing 66kV Vennakkara-Nenmara single circuit line to 110kV double circuit line has been commenced by KSEBL on 28.12.2021. Working estimate amounting to Rs 2,40,00,000/- has been sanctioned for this work from the office of the Deputy Chief Engineer, Transmission Circle, Palakkad vide no. TCP/DB-43.16/Nenmara-Kalapetty/20-21/1883 dt 17.12.2020. Since the existing 66kV Kannampully SubStation (The upgradation of this Substation to 110kV is also ongoing) exists amidst this line, the work is planned to be executed in two stretches. The first stretch is to upgrade the portion of line from Nenmara (75<sup>th</sup> tower) to Kannampully Substation and the second stretch from Kannampully to Vennakkara. Now the existing 66kV supply to Kannampully is fed from Vennakkara. A portion of this 66kV Supply will be retained at Kannampully and the other portion will be upgraded to 110kV. Then 110kV supply has to be availed to Kannampully from Nenmara after the upgradation of Nenmara-Kannampully line to 110kV. These works are a part of phasing out the 66kV systems for meeting the future load demands in the area and meeting the voltage constraints. As such the upgradation work from Nenmara to Kannampully has very much significance as far as KSEBL is concerned.

The work is planned to be carried out such that the upgraded towers are to be placed in the same locations and the 110kV line to be constructed along the same Right of Way of the existing 66kV line. The towers at locations 72 and 73 and about a length of around 450 mtrs of this line at Cheramangalam passes through the forest areas. The upgradation of this line will create only an increase in base area from 3x3 sqm to 5.182x5.182sqm. On inspection of the site, it is found no additional trees will have to be cut down due to this upgradation. The upgraded line has to be interconnected with the 110kV Kollengode-Nenmara line to Nenmara Sub Station. This interconnection is to be made at existing location 75 of Vennakkara-Nenmara line, ie at the 4th tower from Nenmara Sub Station. Practically the entry of the line to Nenmara Substation can be taken only through this Right of Way. Hence no possibility of finding an alternative route for drawing the line to avoid the existing route through the forest land. Considering this and the essentiality of providing 110kV supply to Kannampully Sub Station from Nenmara it is very much inevitable to upgrade the towers at existing locations 72 and 73 at Cheramangalam and to draw 110kV line.

DEPUTY CHIEF ENGINEER
DEPUTY CHIEF ENGINEER