### പതിനാലാം കേരള നിയമസഭ പതിനാറാം സമ്മേളനം

നക്ഷത്ര ചിഹ്നമീടാത്ത ചോദ്യം നമ്പർ. 4282

12.11.2019-ൽ മറുപടിക്ക്

വാഴ്ടർ 110 കെ.വി. സബ് സ്റ്റേഷൻ നിർമ്മാണം

വാഴർ 110 കെ.വി. സബ് സ്റ്റേഷൻ നിരമ്മാനം			
	<u>ചോദ്യം</u> ഡോ.എൻ. ജയരാജ്		<u>മറുപടി</u> ശ്രീ. എം.എം. മണി (വൈദ്യുതി വകുപ്പു മന്ത്രി)
(എ)	വാഴൂർ 110 കെ.വി. സബ് സ്റ്റേഷന്റെ നിർമ്മാണവുമായി ബന്ധപ്പെട്ട പ്രവർത്തനങ്ങൾ ഇപ്പോൾ ഏത് ഘട്ടത്തിലാണെന്ന് അറിയിക്കാമോ;		ഭരണാന്രമതി ലഭിച്ചു. സ്ഥലം ഏറ്റെടുക്കൽ നടപടികൾ പുരോഗമിച്ചുവരുന്നു.
(ബി)	പ്രസ്തത പ്രവൃത്തിക്ക് ഇക അനുവദിച്ച ഭരണാന്ദമതി ഉത്തരവിന്റെ പകർപ്പ് ലഭ്യമാക്കാമോ;	(ബി)	ഭരണാനുമതി ഉത്തരവിന്റെ പകർപ്പ് അനുബന്ധമായി ചേർത്തിരിക്കുന്നു.
(സി)	പ്രസ്തൃത പ്രവൃത്തിക്കായുള്ള സ്ഥല മേറ്റെടുക്കൽ നടപടികൾ ഇപ്പോൾ ഏത് ഘട്ടത്തിലാണെന്നും പ്രസ്തൃത പദ്ധതിയുടെ നിർമ്മാണം എപ്പോൾ ആരംഭിക്കാൻ സാധിക്കുമെന്നും വ്യക്തമാക്കാമോ ?	)   	സ്ഥലം ഏറ്റെടുക്കുവാനുള്ള നടപടിക്രമങ്ങൾ കോട്ടയം ജില്ലാകളകൂർ ആഫീസ് മുഖേന പുരോഗമിച്ചു വരുന്നു. സ്ഥലം ലഭ്യമായാൽ ഉടൻ തന്നെ നിർമ്മാണ പ്രവർത്തനങ്ങൾ ആരംഭിക്കുവാൻ കഴിയും.

**ഗ**്യക്ഷൻ ഓഫീസർ



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

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#### **ABSTRACT**

Construction of 110kV substation at Vazhoor in Kottayam District- Administrative Sanction accorded-orders issued-

### **CORPORATE OFFICE (SBU-T)**

B.O (FTD) No. 215/2019/D(T&SO)/T7/Vazhoor 110kV /2018-19/Thiruvananthapuram dtd .06-03-2019

Read: 1. Note No.D (T&SO)/T7/NP/110kV s/s Vazhoor/18-19/136/27-02-2019 submitted to the Full Time Directors (Agenda 93/2/19)

- 2. Minutes of the DPR Committee held on 17-11-2018.
- 3. Letter No.CE (TS)/EE1/AEEIV/Vazhoor/18-19/942 dated 18.07.2018 of the Chief Engineer, Transmission South, Thiruvananthapuram.

#### **ORDER**

Major areas of Electrical Section, Vazhoor under Electrical Division, Ponkunnam is presently fed from the 11kV feeders viz. Kappukadu & Nedumavu from 110kV Substation, Pampady, having a feeder circuit length of more than 15 km and the rest of the area is fed from 110kV Substation, Kanjirappally and 33kV Substation, Karukachal. All the above three substations are located beyond the geographical boundary of this section and the area, being at the fag end of all 11kV feeders, is facing acute low voltage problem and frequent interruptions. Due to the excessive length of the 11kV feeders, voltage regulation in standard values could not be made and hence no additional power to the consumers and stake holders are being sanctioned from Vazhoor Section. Maintaining quality power supply without interruption is a real headache in the area as this section is not having an exclusive 11kV feeder and in the present scenario, if the supply from Pampady substation fails, there is no scope for arranging back feeding to the area from any other nearby substations. Hence a substation at Vazhoor area has become essential considering the fact that providing reliable power supply through improved transmission and distribution networks has become the need of the hour due to our regulatory framework also.

The Chief Engineer (Transmission-South) had submitted a proposal read as (3) above, requesting administrative sanction for the construction of a new 110kV Substation at Vazhoor under Transmission Circle, Poovanthuruth, at an estimate amounting to Rs 11.75 Crore.The proposed substation is to be fed from 220kV Substation, Pallom through Pallom — Kanjirappally DC feeder.

## The proposal envisages:

#### Part1

- Construction of 2 Nos. 110kV Feeder Bay such as Pallom-Vazhoor and Vazhoor Kanjirappally with Single bus scheme at Vazhoor S/S.
- Installation of 2X12.5MVA, 110/11kV Transformer bays.
- Construction of a new control room at Vazhoor

The proposal also includes site leveling, construction of retaining wall, compound wall etc. No transportation of cut earth will be required from the proposed site. Only cutting and filling with the available earth, at site will be required for the site leveling.

# Part II - Providing LILO arrangement at the substation

It is proposed to draw the LILO arrangement from Pallom-Mundakkayam feeder (second circuit of Pallom-Kanjirappally line). Location no.76 existing in the plot is a suspension tower which is to be shifted and replaced with a tension tower at the backside of the property for effecting the Line In arrangement and one more tension tower will have to be inserted in the left side of the front portion of the plot for the Line Out a rangement.

According to the report of Load flow study conducted for the proposed project, construction of 110kV Substation at Vazhoor would be essential considering the lengthy 11kV feeders drawn through the area from the substations far away and the constraints faced for providing the reliable and stable supply to the consumers with the presently available Transmission system in the area.

With the introduction of 110kV Substation at Vazhoor, the following technical benefits were observed

- Reduction in peak load system loss by 138kW,
- Better voltage profile in the existing substations concerned
- Improvement in operational easiness, effective utilization of all the feeders and transformers in and around Vazhoor region, thereby improving the system
- Effective management of future load growth and improved level of performance in the Key Performance Indicators like SAIFI, SAIDI etc.

The nearby Ele.section, Pathanad, in the area of which the majority of interruptions are due to the unavailability of independent feeder to this section area, will also be benefited on arrival of the new substation, Vazhoor since an independent feeder of 7km length can be drawn

The proposal was discussed in detail during the DPR committee held on 17-11-2018 .The committee observed that 110kV substation at Vazhoor is technically essential and approved the DPR of the project vide minutes read as (2) above.

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The matter was placed in the meeting of the Full Time Directors held on 28-02-2019 vide note read as (1) above.

Having considered the matter in detail, the Full Time Directors

Resolved to accord administrative sanction for the construction of 110kV substation at Vazhoor in Kottayam District at an estimate amounting to Rs 1175 lakh (Rupees eleven crore and Seventy Five lakh only).

Orders are issued accordingly.

By order of the Full Time Directors,

Sd/-Company Secretary (In- Charge)

To

The Deputy Chief Engineer, Transmission Circle, Poovanthuruth

Copy to:

The Chief Engineer (Transmission South).

The Financial Adviser/ the Chief Internal Auditor

The Deputy Chief Engineer (IT)/The RCAO/the RAO'

The TA to Chairman & Managing Director/ Director (T&SO)/ Director (D & IT)/

Director (G-C&HRM)/ Director (CP, GE, SCM&S)

The PA to Director (Finance)/CA to Company Secretary.

The Fair Copy Superintendent /Library/Stock File.

Forwarded / By Order

**Assistant Executive Engineer** 

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