# SMART GRID (THREE PHASE TRANSFORMER TAP CHANGING USING IOT)

*A project report submitted in partial fulfillment of the requirements*
*For the award of the degree of*

**BACHELOR OF TECHNOLOGY**
**IN**
**ELECTRICAL & ELECTRONICS ENGINEERING**


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(Permanently Affiliated to Jawaharlal Nehru Technological University, Kakinada, AP)
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Tamaram, Narsipatnam, Visakhapatnam-531113


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## CERTIFICATE

This is certify that the project report entitled "SMART GRID(THREE PHASE TRANSFORMER TAP CHANGE USING IOT) " is a bonafide work submitted by D.NOOKESH, V.VAMSI, P. RAMESH, P.OOHA, D.GANESH in partial fulfillment of the requirements for the award of degree of

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## ABSTRACT

Industry around the world is spending large amount of money to developing infrastructure required for smart grid. Smart Grid is a concept regarding digital technology application and electric power network. The traditional electrical grid what happens you know that ,what we consuming electricity that is generated by some generating stations and is basically carried through different electrical you know that electrical transmission devices and transmission lines .The traditional electrical grid is line losses and insecure . It is economical point of view also not good. We focus on that issue, It means future technology that is a smart grid. The smart grid is control and manages all types of loads by using IOT. What it means the smart grid is computerized methodology and programmable IOT.

In this project our team concentrates on all type of loads, example home applications. Based on our controlling requirement we develop a smart app, by using smart app easy to control all allocated loads only and we take one more challenge that is, in distribution stations transformer tap changing is very difficult task, we make it is also easy to control through what we are developing app. Unbalancing the power variations in loads easily control through IOT. And it is two way communication consumer to supplier and vice versa. smart meters are used to home application because every time to time updates .By using IOT based smart grid to reduce losses increase efficiency and secure and more reliable .