Manuscript. Id.	Volume 1Issue 1, September 2020, ISSN: (Online)		Page No.
CTEEE 001	**Author**	Ankita Mankar, Dr. D. R. Tutakane	
	Paper Title	Implementation of Three Phase Earth Leakage Circuit Breaker	
	Abstract: - An ECLB is one kind of safety device used for installing an electrical device with high earth impedance to avoid shock. These devices identify small stray voltages of the electrical device on the metal enclosures and intrude the circuit if a dangerous voltage is identified. The main purpose of Earth leakage circuit breaker (ECLB) is to stop damage to humans & animals due to electric shock. An ELCB is a specific type of latching relay that has a structure's incoming mains power associated through its switching contacts so that the circuit breaker detaches the power in an unsafe condition.The ELCB notices fault currents of human or animal to the earth wire in the connection it guards. If ample voltage seems across the ELCB's sense coil, it will turn off the power, and remain off until manually rearrange. A voltage sensing ELCB doesn't detect fault currents from human or animal to the earth. **Keywords**: - Earth leakage circuit breaker, Residual circuit breaker **Reference** 1. Christopher Shelton, Electrical installations third edition, Nelson Thornes, 2004,page 233 2. Van C Warrington, "Protective Relays" Vol.-I & II 3. Ravindranath, M.Chander, "Power System Protection and SwitchGear", Wiley Eastern Ltd. New Delhi. 4. John J Grainger, W. D. Stevenson, "Power System Analysis", TMH Publication 5. P. Kundur, "Power System Stability and Control", TMH Publication 6. Three-phase electric power [Online]. Available:http://en.wikipedia.org/wiki/Three-phase_electric_power 7. M.A.B Suarin et all, "Automatic Tester Device for Earth Leakage Circuit 8. Breaker," Univ Mal. Pahang, Pahang. 9. Earth leakage circuit breaker [Online].Available:http://en.wikipedia.org/wiki/Earth_leakage_circuit_breaker 10. C. France. (2011). Residual Current Circuit Breaker – RCCB [Online]. Available: http://www.gcsescience.com/pme9.htm 11. Residual-current device [Online]. Available:http://en.wikipedia.org/wiki/Residual-current_device	**1-4**
CTEEE 002	**Author**	Snehal A Ingewar,Dr. D. R. Tutakane	
	Paper Title	Solar Inverter Connected With Grid	
	Abstract: - A Solar Inverter or PV inverter, is a type of electrical converter which converters the variable Direct Current (DC)output of a Photovoltaic (PV) Solar Panel into a Utility Frequency (AC) that can be fed into a Commercial electrical grid or used by a local, off-grid electrical network. It is a critical balance of system (BOS) component in a photovoltaic system, allowing Photovoltaic (PV) solar inverter is equipment that converts the DC output of solar batteries to the AC power which meets the requirements of the gird, its	**5-8**

	performance and quality are directly related to the photovoltaic effect on the public grid. Current national standard specifies only the requirements for protection and did not develop appropriate testing rules and procedures. This paper researched and developed the PV grid-connected inverter detects platform, analyzed the PV grid-connected inverter protective function and testing methods and procedures. We realized the PC integration of the system and the automatic test of the inverter by using Kingview software, to ensure the reliability and accuracy of test results, in addition, the host computer system has proved ease of use, stability and scalability. **Keywords**: - photovoltaic power generation; photovoltaic grid-connected inverter; automatic detecting platform; king view.. **Reference** 1. GB/T 15945-2008. Power quality, power supply frequency deviation [S]. 2. Q/GDW 480-2010. Distributed power grid technical requirements [S]. 3. Q/GDW 617-2011. PV power plant connected to the grid technical requirements [S]. 4. Q/GDW 618-2011. Photovoltaic power plants connected to the grid test procedures [S]. 5. Q/TGS 1063-2011. Distributed power grid technical standards [S]. 6. CNCA/CTS 0004-2009A. Grid-connected PV inverters technical conditions [S]. 7. GB/T 19939-2005. PV systems and network technical requirements [S]. 8. Ni Song, Kang Wei. PV grid-connected inverter certification [J]. Authentication technology,2010, (3):40-41. 9. Zhang Xin, Cao Renxian. Solar photovoltaic power generation and inverter control [M]. Beijing: Machinery Industry Press,2010.9:18 10. Yan Huaguang, Zhang Xin, Yang Xiangjiang, Wang He, Fan Ying, Jiang Limin, Li Taoyong. PV inverter testing platform development [J]. Grid,2011, 5(6):139-143. 11. Wichert B, Dymond M, Lawrance W. Development of a test facility for photovoltaic-diesel hybrid energy systems[J]. Renewable Energy, 2001, 22(1):311-319.	
CTEEE 003	**Author** | Reshma K.Kadu,Dr. D. R. Tutakane **Paper Title** | Implementation OF Three Phase Variable Frequency Drive **Abstract**: - This paper is intended to provide a novel and simpler way of speed control three phase induction motor using simultaneous .The wide range control technique of three speed of induction motor has presented. With this technique the speed control is obtained by changing speed using simultaneous control of frequency and the three voltages which are spaced by 120o with respect to each other at all frequency. The variable frequency drive works principle, it's the electronic controller specifically designed to change the frequency and control signal voltage supplied to the controller and thereby the stator of three phase induction motor. **Keywords**: Variable Frequency Drive (VFD), Inverter, Induction Motor, Rectifier **Reference** 1. Robert G. Schieman, Edward A. Wilkes, and Howard E.Jordan, "Solid state control of Electric Drives", Proceeding of the IEEE, Vol. 62, No. 12, December 1974, pp. 1643-1660. Robert Schieman, P.E., "AC Harmonics Easily Identified, Nullified, Power Transmission Design, November, 1990.	**09-12**

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CTEEE004	**Author**	Ms.Swarnita Gorakshnath Kale,Prof.Manoj Kumar	
	Paper Title	A survey of ISI & PAPR reduction techniques in OFDM	**13-18**

Abstract: - Orthogonal frequency-division multiplexing (OFDM) effectively mitigates inter symbol interference (ISI) caused by the delay unfold of wireless channels. The rise within the range of wireless devices and also the demand for higher information rates places an increasing demand on information measure. This necessitates the requirement for communication systems with redoubled turnout and capability. Multiple input multiple output orthogonal frequency division multiplexing (MIMO-OFDM) is a way to satisfy this would like. OFDM is employed in several wireless communication devices and offers high spectral potency and resilience to multipath channel effects. Therefore, it's been utilized in several wireless systems and adopted by varied standards. During this paper, we tend to gift a comprehensive survey on OFDM for wireless communications techniques for receiver planning as references. In telecommunications, orthogonal frequency- division multiplexing (OFDM) is a method of encoding digital data on multiple carrier frequencies. OFDM has developed into a popular scheme for wideband digital communication, used in applications such as digital television and audio broadcasting, DSL internet access, wireless networks, power line networks, and 4G mobile communications. The main advantage of OFDM over single-carrier schemes is its ability to cope with severe channel conditions (for example, attenuation of high frequencies in a long copper wire, narrowband interference and frequency-selective fading due to multipath) without complex equalization filters. Channel equalization is simplified because OFDM may be viewed as using many slowly modulated narrowband signals rather than one rapidly modulated wideband signal. The low symbol rate makes the use of a guard interval between symbols affordable, making it possible to eliminate inter symbol interference (ISI) and use echoes and

time-spreading (in analog television visible as ghosting and blurring, respectively) to achieve a diversity gain, i.e. a signal-to- noise ratio improvement.

Keywords: - Channel estimation, frequency-offset estimation, inter carrier interference (ICI), multicarrier (MC), multiple input–multiple-output (MIMO) orthogonal frequency-division multiplexing (OFDM), peak-to-average power reduction, and time offset estimation

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Rajasthan, India & Communication
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CTEEE 005

Author Ms.Swarnita Gorakshnath Kale,Prof.Manoj Kumar

Paper Title Spectral Emission Mask Shaping for OFDM in Cognitive Radios

Abstract: - Orthogonal Frequency Division Multiplexing(OFDM) is characterized by spectral efficiency. It enables flexible and agile spectrum allocation. But still it lags as it suffers from spectral leakage in the form of large side lobes. It leads to inter- channel interference if not handled carefully.in proposed system spectral emission mask system is implemented to combat spectral leakage and ultimately avoiding adjacent channel interference. A spectral mask, also known as a channel mask or transmission mask is a mathematically-defined set of lines applied to the levels of radio (or optical) transmissions. The spectral mask is generally intended to reduce adjacent-channel interference by limiting excessive radiation at frequencies beyond the necessary bandwidth. The proposed system is implemented over MATLAB platform using script language.

Keywords: -
MATLAB, Spectral Mask, OFDM, Inter channel interference

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