Real-Time Condition Monitoring System for Wind Turbines

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Abstract

The move towards a de-carbonised world, driven partly by climate science and partly by the business opportunities it offers, will need the promotion of environmentally friendly alternatives, if an acceptable stabilisation level of atmospheric carbon dioxide is to be achieved. This requires the harnessing and use of natural resources that produce no air pollution or greenhouse gases and provides comfortable coexistence of human, livestock, and plants. This article presents a comprehensive review of energy sources, and the development of sustainable technologies to explore these energy sources. It also includes potential renewable energy technologies, efficient energy systems, energy savings techniques and other mitigation measures necessary to reduce climate changes. The article concludes with the technical status of the ground source heat pumps (GSHP) technologies

Biography:

Payam Teimourzadeh Baboli (S'08-M'15-SM'20) received his B.Sc. degree in electrical engineering from the University of

Mazandaran (UMZ), Babolsar, Iran in 2007, and his M.Sc. and Ph.D. degrees in electrical engineering specializing in power systems both from the Tarbiat Modares University (TMU), Tehran, Iran in 2009 and 2014, respectively. He has been with UMZ, as an Assistant Professor in Electrical Engineering from Feb. 2015 to Jul. 2019. Since Aug. 2019, he is with OFFIS which is an institute for information technology as Principal Scientist. Since 2008, he also acts as a Senior Researcher with the Iranian Power System Engineering Research Center (IPSERC), Tehran, Iran.

References

- Energy management and operation modelling of hybrid AC-DC microgrid IET Generation, Transmission & Distribution 8 (10), 1700-1711412014
- Customer behavior based demand response model Power and Energy Society General Meeting, 2012 IEEE, 1-7 85*2012
- Including the Behavioral Aspects of Customers in Demand Response Model: Real Time Pricing Versus Peak Time Rebate North American Power Symposium (NAPS) 54 2015