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Education/ Academic qualifications (start with your most recent education first)				
Year	School / University		Specialization	Degree
2015	Faculty of Engineering/		Electrical Power and	Ph.D.
	Tanta University		Machine Engineering	
2008	Faculty of Engineering/		Electrical Power and	M.Sc.
	Tanta University		Machine Engineering	
2004	Faculty of Engineering/		Electrical Power and	B.Sc.
	Tanta University		Machine Engineering	
Academic Employment History (start with your most recent education first)				
From:	To:	University / Organization		Title of Position
2021	Present	Faculty of Engineering/ Tanta University		Associate professor
2015	2021	Faculty of Engineering/ Tanta University		Lecturer
2008	2015	Faculty of Engineering/ Tanta University		Assistant lecturer
2006	2008	Faculty of Engineering/ Tanta University		Instructor
Administrative Positions:				
From:	To:	University / Organization		Title of Position
2021	Present	Faculty of Engineering/ Tanta University		Energy and Electrical Systems Engineering Program Coordinator

Teaching Experience (Courses, Language, Higher Education Only)

Courses

Power system protection - Electrical Installation engineering - Electrical Machine Design - Power system analysis - Electrical circuits - Power systems - Economic operation of power systems - Power electronics.

Language: English B.Sc. projects:

I do hereby declare that the information furnished above is true to the best of my knowledge.





- A faulted side identification scheme-based integrated distance protection for seriescompensated transmission lines
- Optimal PMU Allocation for High-Sensitivity Wide-Area Backup Protection Scheme of Transmission Lines
- Online economic dispatch using intelligent techniques
- Analysis of photovoltaic performance
- Economic operation of renewable energy sources

Publications:

Journal Paper

- [1] <u>Hossam A. Abd el-Ghany</u>, A.A. Abou El Ela, G.E. Ali, "Maximal Optimal Preventive Control Actions in Unit Commitment using Partial Swarm Optimization," AEJ Alexandria Engineering Journal, Vol. 47, No. 6, pp. 511-522, Nov. 2008.
- [2] <u>Hossam A. Abd el-Ghany</u>, A.A. Abou El Ela, G.E. Ali, "A Profit-Based Unit Commitment using Different Hybrid Particle Swarm Optimization for Competitive Market," International Energy Journal, Vol. 9, No. 4, pp. 281-290, Dec. 2008.
- [3] <u>Hossam A. Abd el-Ghany</u>, Ahmed M. Azmy, "Defining the Practical Constraints of Inserting DG Units in Distribution Systems Regarding Protection Schemes," International Transactions on Electrical Energy Systems, Vol. 25, No. 12, pp. 3618-3629, Dec. 2015, DOI:10.1002/etep.2056
- [4] Hossam A. Abd el-Ghany, Ahmed M. Azmy, Nagy I. Elkalashy, Essam M. Rashad, "Optimizing DG Penetration in Distribution Networks Concerning Protection Schemes and Technical Impact," Electric Power Systems Research, Vol. 128, pp. 113-122, Jul. 2015. DOI:10.1016/j.epsr.2015.07.005
- [5] Abd-El Fattah Hamad, <u>Hossam A. Abd el-Ghany</u>, Ahmed M. Azmy: Switching strategy for DG optimal allocation during repairing fault periods on loop distribution networks," International Transactions on Electrical Energy Systems, Vol. 27, No. 12, Oct. 2017, e2454., DOI:10.1002/etep.2454 Ismail A Soliman,
- [6] <u>Hossam A. Abd el-Ghany</u>, Ahmed Mohamed Azmy, "A Robust Differential Protection Technique for Single Core Delta-Hexagonal Phase-Shifting Transformers," International Journal of Electrical Power & Energy Systems, Vol. 109, pp. 207-216, Feb. 2019. DOI:10.1016/j.ijepes.2019.02.015.
- [7] <u>Hossam A. Abd el-Ghany</u>, Eman Saad Ahmed, Mahmoud A. Elsadd: A faulted side identification scheme-based integrated distance protection for series-compensated transmission lines. International Journal of Electrical Power & Energy Systems, Vol. 113, pp. 664-673, jun. 2019. DOI:10.1016/j.ijepes.2019.06.021
- [8] Ismail A. Soliman, <u>Hossam A. Abd el-Ghany</u>, Ahmed M. Azmy, "A Robust Differential Protection Technique for Single Core Delta-hexagonal Phase-shifting Transformers," Electrical Power and Energy Systems, Vol. 109, pp. 207–216, 2019.
- [9] <u>Hossam A. Abd el-Ghany</u>, Ahmed M. Azmy, and Ahmed Magdy Abeid, "A General Travelling-Wave Based Scheme for Locating Simultaneous Faults in Transmission", IEEE Transactions on Power Delivery, DOI 10.1109/TPWRD.2019.2931178, IEEE.
- [10] <u>Hossam A. Abd el-Ghany</u>, Ahmed Mohamed Azmy, Mohamed Attia Saad, "Optimal DG Deployment Based on Technical and Economic Considerations with Daily Load Variation," International Journal of Engineering Research in Africa, Vol. 45, pp. 115-131, Nov. 2019.
- [11] Walaa S. Sakr, <u>Hossam A. Abd el-Ghany</u>, Ragab A. EL-Sehiemy, Ahmed M. Azmy, "Technoeconomic assessment of consumers' participation in the demand response program for optimal dayahead scheduling of virtual power plants," Alexandria Engineering Journal, Vol. 59, No. 1, pp. 399–415, Feb. 2020. https://doi.org/10.1016/j.aej.2020.01.009.

I do hereby declare that the information furnished above is true to the best of my knowledge.





- [12] Eatmad W. Nahas, Diaa-Eldin A. Mansour, <u>Hossam A. Abd el-Ghany</u>, M. M. Eissa, "Developing A Smart Power-Voltage Relay (SPV-Relay) with no Communication System for DC Microgrids," Electric Power Systems Research, Vol. 187, Oct. 2020, 106432. https://doi.org/10.1016/j.epsr.2020.106432
- [13] <u>Hossam A. Abd el-Ghany</u>, "Optimal PMU Allocation for High-Sensitivity Wide-Area Backup Protection Scheme of Transmission Lines," Electric Power Systems Research, Vol. 187, 2020, 106485. https://doi.org/10.1016/j.epsr.2020.106485.
- [14] <u>Hossam A. Abd el-Ghany</u>, Ismail A. Soliman, Ahmed M. Azmy, "A reliable differential protection algorithm for delta hexagonal phase-shifting transformers," International Journal of Electrical Power & Energy Systems, Vol. 127, 2021, 106671, https://doi.org/10.1016/j.ijepes.2020.106671.
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- [16] Ahmed M. Elkholy, <u>Hossam A. Abd el-Ghany</u> and Ahmed M. Azmy, "General Framework for Intentional Islanding to Enhance Distribution System Performance," Electric Power Components and Systems, Vol. 48, No. 15, pp. 1-37, 2021. DOI: 10.1080/15325008.2020.1856227
- [17] A. E. ELGebaly, I. B. M. Taha, A. M. Azmy and <u>Hossam A. Abd el-Ghany</u>, "Optimal design and control of SSSCs for TLs considering technical and economic indices using GA and SAMPE-JAYA algorithms," in *IEEE Access*, Vol. 9, 2021. doi: 10.1109/ACCESS.2021.3063807.
- [18] <u>Hossam A. Abd el-Ghany</u>, Abd-El Fattah S. Hammad, Ahmed M. Azmy, "Evaluating the effect of considering repairing-fault periods on calculating technical losses in medium-voltage feeders of ring distribution networks," Electric Power Systems Research, Vol. 196, 2021, 107192.
- [19] <u>Hossam A. Abd el-Ghany</u>, Ahmed E. ELGebaly, Ibrahim B.M. Taha, "A new monitoring technique for fault detection and classification in PV systems based on rate of change of voltage-current trajectory," International Journal of Electrical Power & Energy Systems, Vol. 133, 2021, 107248.
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- [21] <u>Hossam A. Abd el-Ghany</u>, E. S. Ahmed and A. E. ELGebaly, "A Reliable Loss of Excitation Protection Technique Based on EPFA for Synchronous Generators," in *IEEE Transactions on Power Delivery*, vol. 37, no. 3, pp. 1445-1455, June 2022, doi: 10.1109/TPWRD.2021.3087538.
- [22] Walaa S. Sakr, Ragab A. EL-Sehiemy, Ahmed M. Azmy, <u>Hossam A. Abd el-Ghany</u>, "Identifying optimal border of virtual power plants considering uncertainties and demand response," Alexandria Engineering Journal, Vol. 61, no. 12, pp. 9673-9713, 2022. https://doi.org/10.1016/j.aej.2022.02.070.
- [23] F. M. Aboshady and <u>Hossam A. Abd el-Ghany</u>, "Compensating the combined impact of hexagonal phase-shifting transformer and fault resistance on the distance protection," International Journal of Electrical Power & Energy Systems, Vol. 141, 2022, 108188, https://doi.org/10.1016/j.ijepes.2022.108188.
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- [27] <u>Hossam A. Abd El-Ghany</u>, Mohammed. I. Elmezain, Essam. M. Rashad and Eman S. Ahmed, "Discrete-Wavelet -based Scheme for Protection Coordination of Hybrid AC/DC Distribution Networks" Alexandria Engineering Journal,90 (2024) 76-88, https://doi.org/10.1016/j.arj.2024.01.060.
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Conference Proceedings

- [29] Hossam A. Abd el-Ghany, Ahmed M. Azmy, Nagy I. Elkalashy, Essam M. Rashad, "Optimal Siting and Sizing of DG Units Based on Protection Schemes and Technical Aspects," The 17th International Middle East Power Systems Conference MEPCON'15, Mansoura University, Egypt, December 15-17, 2015, Mansoura University, Mansoura, Egypt, December 15-17, 2015.
- [30] Ahmed Magdy Abeid, <u>Hossam A. Abd el-Ghany</u>, Ahmed M. Azmy, "An Advanced Traveling-Wave Fault-Location Algorithm for Simultaneous Faults," 2017 Nineteenth International Middle East Power Systems Conference (MEPCON), Cairo, 2017, pp. 747-752.
- [31] Ahmed M. Elkholy, <u>Hossam A. Abd El-Ghany</u>, Ahmed M. Azmy, "A Proposed Load Shedding Mechanism for Enhancing Intentional-Islanding Dynamics of Distribution Systems," 2017 Nineteenth International Middle East Power Systems Conference (MEPCON), Cairo, 2017, pp. 870-875.
- [32] Mohamed Attia Saad, <u>Hossam A. Abd el-Ghany</u> and Ahmed M. Azmy, "Optimal DG Deployment to Improve Voltage Stability Margin Considering Load Variation," 2017 Nineteenth International Middle East Power Systems Conference (MEPCON), Cairo, 2017, pp. 765-771.
- [33] Abeer. A. Kholeif, <u>Hossam A. Abd el-Ghany</u> and Ahmed M. Azmy, "Impact of supply voltage variation on V-I trajectory identification method," *2017 Nineteenth International Middle East Power Systems Conference (MEPCON)*, Cairo, 2017, pp. 839-844.
- [34] Eatmad W. Nahas, Diaa-Eldin A. Mansour, <u>Hossam A. Abd el-Ghany</u>, M.M. Eissa, "Accurate Fault Analysis and Proposed Protection Scheme for Battery Energy Storage System Integrated with DC Microgrids," *2018 Twentieth International Middle East Power Systems Conference* (*MEPCON*), Cairo, Egypt, 2018, pp. 911-917.
- [35] Ahmed M. Elkholy, Hossam A. Abd el-Ghany, Ahmed M. Azmy, "An Advanced Load Shedding Algorithm to Enhance Intentional-Islanding Dynamics," 2018 Twentieth International Middle East Power Systems Conference (MEPCON), Cairo, Egypt, 2018, pp. 797-802.
- [36] Hossam A. Abd el-Ghany, Mahmoud A. ElSadd, Eman S. Ahmed, "A New Method of Unintentional Islanding Detection for Distribution Network with Synchronous DG," 2018 Twentieth International Middle East Power Systems Conference (MEPCON), Cairo, Egypt, 2018, pp. 1046-1052.
- [37] Ismail A Soliman, <u>Hossam A. Abd el-Ghany</u>, Ahmed M Azmy, "A Proposed Algorithm for Current Differential Protection of Delta Hexagonal Phase Shifting Transformer," 2018 Twentieth

I do hereby declare that the information furnished above is true to the best of my knowledge.





- International Middle East Power Systems Conference (MEPCON), Cairo, Egypt, 2018, pp. 785-790.
- [38] <u>Hossam A. Abd el-Ghany</u>, Abd El-Fattah Hamad, Ahmed Mohamed Azmy, "Optimal DG allocation in LV distribution networks considering repairing fault periods," 25th International Conference on Electricity Distribution (CIRED 2019), Madrid, Spain; paper No. 627, 3-6 June 2019.
- [39] <u>Hossam A. Abd el-Ghany</u>, Ahmed Mohamed Azmy, Mohamed Attia Saad, "Technical Performance Enhancement of Distribution System via Optimal DG Deployment," 25th International Conference on Electricity Distribution (CIRED 2019), Madrid, Spain; paper No. 104, 3-6 June 2019.
- [40] Ismail A Soliman, <u>Hossam A. Abd el-Ghany</u>, Ahmed M Azmy, "A Comprehensive Differential Protection Scheme for Delta Hexagonal Phase Angle Regulating Transformers," 2019 AEIT International Annual Conference, Florence, Italia, 18-20 Sep. 2019.
- [41] <u>Hossam A. Abd el-Ghany</u>, Ahmed M. Azmy, Ahmed Magdy Abeid, "A Robust Travelling-Wave Simultaneous Faults Location Considering Parameters Variations," 2019 AEIT International Annual Conference, Florence, Italia, 18-20 Sep. 2019.
- [42] W. S. Sakr, <u>Hossam A. Abd El-Ghany</u>, Ragab A. El-Sehiemy and Ahmed M. Azmy, "A dayahead optimal RERs scheduling approach for virtual power plants considering different loading conditions," 2019 21st International Middle East Power Systems Conference (MEPCON), Tanta University, Egypt, 2019.
- [43] Eman S. Ahmad, <u>Hossam A. Abd El-Ghany</u> and Almoataz Y. Abdelaziz, "An Integrated Power Differential Scheme for Tertiary Power Transformer Protection," 2019 21st International Middle East Power Systems Conference (MEPCON), Tanta University, Egypt, 2019.
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- [45] A. -E. F. S. Hammad, A. M. Azmy and <u>Hossam A. Abd el-Ghany</u>, "Proposed Simplified Formula for Calculating Technical Losses in Radial Distribution Feeders Considering Repairing-Fault Periods," *2021 22nd International Middle East Power* Systems Conference (MEPCON), 2021, pp. 659-664, doi: 10.1109/MEPCON50283.2021.9686278.
- [46] A. -E. F. S. Hammad, <u>Hossam A. Abd el-Ghany</u> and A. M. Azmy, "Estimation of Technical Losses in Distribution Networks with Tie Switches Considering Repairing Periods", 2022 23rd International Middle East Power Systems Conference (MEPCON), 01-05.
- [47] M. I. Elmezain, <u>Hossam A. Abd el-Ghany</u>, E. M. Rashad and E. S. Ahmed, "Analysis of Hybrid AC/DC Distribution Network Under Adverse Conditions," 2022 23rd International Middle East Power Systems Conference (MEPCON), Cairo, Egypt, 2022, pp. 1-6, doi: 10.1109/MEPCON55441.2022.10021767.

Book Chapter

Hossam A. Abd el-Ghany, E. M. Rashad, A. M. Azmy, and N. I. Elkalashy, "Identifying Hosting Capacity of Renewable DG Units in Smart Grids Considering Protection Systems," In: Das, S.K., Islam, M.R., Xu, W. (eds) Advances in Control Techniques for Smart Grid Applications. Springer, Singapore, 2022. https://doi.org/10.1007/978-981-16-9856-9_6.

I do hereby declare that the information furnished above is true to the best of my knowledge.





Other Relevant Experience

Other activities

- Participating in the construction of the labs of electrical power and machines in the Faculty of Engineering, Tanta University (Tanta cities)
- Consultant of many projects inside and outside the Tanta University
- Attending 14 training workshops through the national development project "FLDP"
- A member in the management team of the QAAP project in Faculty of Engineering, Tanta University
- A member in the committee of developing the post-graduate bylaw
- A member in the committee of developing the under-graduate bylaw
- A member in the committee of developing the Renewable energy engineering program bylaw

Completed-Thesis Supervision

- Supervisor of 12 approved M.Sc. theses
- Supervisor of 4 approved Ph.D. theses

Fields of research

- Development and Evaluation of Differential Protection for Phase-Shifting Transformers
- Protection Scheme for Low Voltage DC microgrids
- Fault Location of Simultaneous Faults based on Travelling Waves Technique
- A faulted side identification scheme-based integrated distance protection for seriescompensated transmission lines
- Optimal PMU Allocation for High-Sensitivity Wide-Area Backup Protection Scheme of Transmission Lines
- Islanding Scenarios for High Reliable Operation of Distribution Network
- Electrical Appliances Identification Based on Non-Intrusive Load Signatures
- Optimal Coordination of Directional Overcurrent Relays for sub transmission systems with Distributed Generation
- Optimal Penetration of Distributed Generation without Modifying Protection Coordination in Distributed Networks
- Optimal Placement and Sizing of Distributed Generating Units in Ring Feeders
- -Optimization techniques in power systems
- -Economic aspects of distributed generating units such as fuel cells and micro-turbines when used to supply residential loads

I do hereby declare that the information furnished above is true to the best of my knowledge.