Resume

Personal Details:

Name and surname: Abbas Fattahi
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Marital status: Married
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Educational Records:

- First place in Bachelor of Electrical Engineering, Electronic Orientation, Razi University - GPA: 88.5/100 (Graduated in 1996), The subject of the project: "Multi-layer perceptron neural network simulation".
- First place in Master of Electrical Engineering, Power Orientation, Sharif University of Technology - GPA: 91.05/100 (Graduation 1999), The subject of the project: "Dynamic investigation of large power plants in connection to the power grid".
- Doctor of Electrical Engineering, Power Orientation, Sharif University of Technology - GPA: 85.5/100 (Graduated in 2007), Dissertation topic: "Improving congestion management and congestion cost allocation in restructured power systems".

Educational Records:

- Faculty Member, Electrical Engineering Department, Science and Research Branch, Islamic Azad University, Tehran, Iran, (2002-2008).
- Faculty Member, Electrical Engineering Department, Bu-Ali Sina University, Hamedan, Iran (2008-2009).
- Faculty Member, Electrical Engineering Department, Hamedan University of Technology, Hamedan, Iran (from 2008 to now).

Managerial Records:

- President of Payame-Noor University, Malayer Center (2008-2012).
- Vice-Chancellor of education and research at Hamedan University of Technology (2014-2016).
- Head of the office of the president at Hamedan University of Technology (from 2021 until now).

Industrial Experiences:

- Director of electrical section in the energy audit projects of Mina Glass, Ahvaz Steel, Mobarakeh Steel, Sepahan Cement, Razi Petrochemical companies, Energy audit group of Sharif University of Technology (1997-1998).
- Director of electrical section in the energy audit project of Bandar Imam Petrochemical Company, Energy audit group of Iran Scientific and Industrial Researches Organization (1999).
- Director of electrical section in the energy audit project of Oil platforms of Iranian Continental Shelf Oil Company, Energy audit group of Iran Oil Industry Research Institute (2000)
- Representative of the National Electricity Dispatching in the launching of Iran National Electricity Market, Tavanir Company (2001- 2002).

- Implementation of the research project of replacing gas turbines with electric motors in Iranian gas pressure boosting stations, Iran National Gas Company (2005-2006).
- Designer and implementer of the electrical and instrumentation sections of the project of increasing the capacity of gas turbines of the Gachsaran pressure boosting station, Oil and Gas operation Company of Southern oil-rich Areas (2006-2007).
- Member of the Research Committee of Hamedan Electricity Distribution Company (2014-2018).

Research Activities:

- **Applied Research Projects and Consulting**
  - ✓ "Design and implementation of a software for optimal forecasting of daily consumption needs in Hamedan Electricity Distribution Company", Hamedan, Hamedan Electricity Distribution Company, (2012).
  - ✓ "Study of the pattern of electricity consumption of different industries to accurately predict the hourly consumption of electrical energy in Bakhtar Regional Electric Company", Arak, Bakhtar Regional Electric Company, terminated, (2017).
  - ✓ "Review and evaluation of the studies conducted by the investor consultant of distributed generators to connect to the grid and provide corrections in the proposed plan and the conducted studies, as well as review the results of the entry and connection of distributed generators to the electricity distribution network of Hamedan Province" Hamedan, Hamedan Electricity Distribution Company, (2018-2021).
  - ✓ "Technical studies of the connection plan of 2 MW photovoltaic power plant of Arde-Sina Production Company to the electricity distribution network of Hamedan province (based on the new instructions for connecting distributed generation resources to the Iran electricity network)", Hamedan, Hamedan Electricity Distribution Company, (2021).
  - ✓ "Technical studies of the connection plan of 7 MW photovoltaic power plant of Aftabe-Foruzane-Rooz to the electricity distribution network of Hamedan Province(based on the new instructions for connecting distributed generation resources to the Iran electricity network)", Hamedan, Hamedan Electricity Distribution Company, (2022)

- **Articles Presented in Conferences:**
  - ✓ H. Oraei, A. Fatahi Mayabadi, T. Niknam, "Optimal planning of reactive power in harmonic environment using genetic algorithm", 17th International Electricity Conference (Power Quality - Load Management), Ministry of Energy, Tavanir Organization, Tehran, Irran, 2002.
  - ✓ H. Barati, A. Fattahi Mayabadi, M. Ehsan, M. Fotuhi, "Evaluation of the role of UPFC to manage transmission line congestion and improve the voltage profile in restructured power systems with a pool market model", 22nd International Electricity Conference (PSC 2007) , Tehran, Iran, 2007.
  - ✓ Z. Rafiee, S. Ganjefar, A. Fattahi Meyabadi ,"A New PSS Tuning Technique using ICA and PSO Methods with the Fourier Transform" Electrical Engineering (ICEE), 18th Iranian Conference, proceeding of ICEE, IEEE, 2010.
  - ✓ A. R. Yari, A. Fattahi Mayabadi, B. Mozafari, "Reducing losses and improving the voltage profile using distribution network reconfiguration using the optimization method (EPSO) and performing simulation on a part of the network of Tehran Electricity Distribution Company", 8th International conference on Energy, Tehran,Iran, 2011.
  - ✓ S. Suri, Y. Moataei, A. Fattahi Mayabadi, "Capacitors placing in distribution networks (A case study)", 17th Conference of Power Distribution Networks, Tehran, Iran, 2012.
  - ✓ A. S. Nikanjam, A. Fattahi Mayabadi, H. Delavari, "Multiple planning of distribution network expansion in the presence of distributed generations using genetic algorithm", 5th National Conference of Electrical and Electronic Engineering, Gonabad, Iran, 2013.
  - ✓ A. Turkman, S. Afsharian, A. Fattahi Meyabadi, "Distribution network reconfiguration in order to

minimize losses by convex mixed integer optimization method", Second international conference on automation of electrical industry, Shiraz,Iran, 2013.

- ✓ H. Habibi Sarv, A. Fatahi Mayabadi, M. Hamzaei, "Investment in production and presentation of linear formulations for the optimal placement of distributed generations in distribution networks", the first annual national congress on the world and energy crisis, Shiraz,Iran, 2015.
- ✓ N. Rajabali, A. Fatahi Mayabadi, S. Ganjefar, "Electric load forecasting using neuro-fuzzy neural network", National Conference on Technology, Energy and Data with Electrical and Computer Engineering Approach, Kermanshah,Iran, 2015.
- ✓ S. M. Reza Tousi, P. Bayat, P. Bayat, A. Fattahi Meyabadi, "New Generation of Inspection Robot for Transmission Lines using Renewable Energy",8th Iranian Conference on Renewable, Clean and Efficient Energy, Tehran, 2015.
- ✓ A. Fattahi Meyabadi, F. Etedadi Aliabadi,"evaluation of operation of inverter in a DC/AC smart grid renewable generation system", 8th International Conference On Electrical Engineering and Renewable Energy, Golestan, 2015.
- ✓ F. Etedadi Aliabadi, A. Fattahi Meyabadi, Dariush Souri, Zahra Siahkali,"strategies for increasing photovoltaic systems efficiency", 8th International Conference On Electrical Engineering and Renewable Energy, Golestan, 2015.
- ✓ F. Etedadi Aliabadi, A. Fattahi Meyabadi," a control scheme for integration of solar photovoltaic, wind turbine and battery storage systems in hybrid DC/AC microgrids", 8th International Conference On Electrical Engineering and Renewable Energy, Golestan, 2015.
- ✓ M. Naderi, M. Vasali Naseh, A. Fattahi Mayabadi, "Hydrochar production from biomass using hydrothermal charring method", 4th International Conference on Applied Researches in Chemical and Biological Sciences, Tehran,Iran, 2017.
- ✓ F. Sarouei, M. Khodabandeh, A. Fattahi, "Optimizing the management of electrical industry projects to reduce time and cost and increase quality using multi-criteria decision making", 28th Iranian Electrical Engineering Conference, Tavanir Company, Tehran, Iran, 2020.

- **Articles Published in Journals:**

- ✓ A. Fatahi Mayabadi, T. Niknam, "Electric Energy Market Management in Restructured Power Systems", Scientific and Research Journal of Electricity, Niro Research Institute, vol. 37, 2003.
- ✓ A. Fattahi Mayabadi, M. Ehsan, "Management of Transmission Lines Congestion in Restructured Power Systems", Scientific and Research Journal of Electricity, Niro Research Institute, vol. 37, 2003.
- ✓ A. Fattahi Meyabadi and M. Ehsan, "Sensitivity Based Redispatching Method for Congestion Management in a Pool Model", International Journal of Emerging Electric Power Systems, vol. 3, no. 2, November 2005.
- ✓ A. Fattahi Meyabadi, H. Barati and M. Ehsan, "Simultaneous Congestion Management and Cost Allocation in a Short-Run Market Model", Iranian Journal of Science and Technology, vol.31, no. B6, pp 617-628, 2007.
- ✓ H. Barati, A. Fattahi Mayabadi, M. Ehsan, S. H. Hosseini, "Setting and adjusting the parameters of Unified Power Transmission Controller (UPFC) to manage transmission line congestion in restructured power systems", Electrical Engineering Journal of Tabriz University (scientific and research)), vol. 39, no. 2, 2009.
- ✓ Z. Rafiee, S. Ganjefar, A. Fattahi Meyabadi, "A New PSS Tuning Technique Using ICA and PSO Methods with the Fourier Transform", Journal of Electrical and Electronic Engineering, vol. 1, no. 1,pp 17-23, 2011.
- ✓ A. Fattahi Meyabadi, Mehdi Ehsan,"A Heuristic Fuzzy Decision-Based Solving of Redispatching Problem for Congestion Management in Restructured Power Systems", Journal of Intelligent & Fuzzy System, 2012.
- ✓ Z. Rafiee, A. Fattahi Meyabadi, "Optimal design of power system stabilizer using a new cost

function and PSO algorithm", International Journal of Power and Energy Conversion, vol. 3, No. 3/4, pp. 253-264, 2012.

- ✓ M. E. Jahromi, M. Ehsan, A. Fattahi Meyabadi and T. Niknam,"An Interactive Fuzzy Multi Objective Approach for Short Term DG Planning", International Journal of Innovative Computing, Information and Control, Vol.8, No.6, pp 4157-4175, June 2012.
- ✓ M. E. Jahromi, M. Ehsan, A. Fattahi Meyabadi, "A dynamic fuzzy interactive approach for DG expansion planning", International Journal of Electrical Power and Energy Systems, vol.43, pp. 1094–1105, 2012.
- ✓ M. Shokri Kamal, A. Fattahi Meyabadi, H. Delavari, "Improvement and Planning for Utilization of Sparse Production Resources in Distribution Networks Using DP Dynamic Algorithm", International Research Journal of Applied and Basic Sciences, vol. 6 (11): 1619-1626, 2013.
- ✓ M. Kalvandi, M. H. Moradi, A. Fattahi Meyabadi, "Wind- photovoltaic hybrid system capacity optimization for cathode conservation station", International Research Journal of Applied and Basic Sciences, Vol. 7 (5): 259-266, 2013.
- ✓ A. Fattahi Meyabadi, A. Sohrabiani, "Multi-purpose reconfiguration of distribution systems by exchanging with microgrid using fuzzy max-min method and particle swarm algorithm, Iranian Journal of Electrical and Computer Engineering (Scientific and Research), vol. 13, no. 2, 2015.
- ✓ Z. Rafiee, A. Fattahi Meyabadi, H. Heydari, "PSS parameters values finding using SMVSDFT objective function and a new technique formulated-objective function in a multi-machine power system", International Journal of Power and Energy Conversion, vol. 6(3), pp.252-266, 2015.
- ✓ M. H. Deihimi, R. A. Naghizadeh, A. Fattahi Meyabadi, "Systematic derivation of parameters of one exponential model for photovoltaic modules using numerical information of data sheet", Renewable Energy, vol. 87, pp. 676-685, 2016.
- ✓ A. Fattahi Meyabadi, M. H. Deihimi, "A review of demand-side management reconsidering theoretical framework", Renewable and Sustainable Energy Review, vol. 80, pp. 367-379, 2017.
- ✓ A. Fattahi, A. Nahavandi, M. R. Jokarzadeh,"A comprehensive reserve allocation method in a micro-grid considering renewable generation intermittency and demand side participation", Energy, vol. 155, pp. 678-689, 2018.
- ✓ N. Rezaei, A. Fattahi, M. H. Deihimi, "A game theory based demand-side management in a smart microgrid considering price-responsive loads via a twofold sustainable energy justice portfolio", Sustainable Energy Technologies and Assessments, vol. 52, pp. 1-20, 2022.
- ✓ S. Shakerinia, A. Fattahi, M. Vahedi, N. Salehi, M. Samiei Moghaddam "Optimal Operation of Microgrids with Worst-Case Renewable Energy Outage: A Mixed-Integer Bi-Level Model", IEEE Access, vol. 11, pp. 59804-59815, 2023.