

## CONTACT INFO

**Address** : EPRA Elektrik Enerji ve İnş. Tic. Ltd. Şti  
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## BIOGRAPHICAL INFO

**Birth Date** : June 13, 1975  
**Place of Birth** : Adana/TURKEY  
**Profession** : Electrical and Electronics Engineer (Ph.D)  
**Citizenship** : Turkish  
**Marital Status** : Married (1 daughter, 1 son)

## EDUCATIONAL BACKGROUND

- **Ph.D.** in Electrical and Electronics Engineering: Middle East Technical University, Ankara, Turkey (2001 - 2008)
- **Ph.D.-Visiting Scholar** in Electrical and Computer Engineering of Illinois Institute of Technology (IIT), Chicago, IL, USA (Sep. 2004 - Aug. 2005) Market operations in power systems. Power system restructuring alternatives for Turkish electricity system.
- **M.Sc.** in Electrical and Electronics Engineering, Middle East Technical University, Ankara, Turkey (1998 - 2001)
- **B.Sc.** in Electrical and Electronics Engineering, Middle East Technical University, Ankara, Turkey (1994 - 1998)

## ACADEMIC EXPERIENCE

- Part-time Lecturer at TOBB Economy and Technology University, Ankara, Turkey. EE 485- Power System Distribution-I&II
- Part-time Lecturer at Middle East Technical University, Ankara, Turkey. EE 578 - Power System Planning
- IEEE Transactions on Power Systems, Member of Editorial Board (2011-2013).

## WORK EXPERIENCE

- **Dec. 2012 to present:**  
Managing partner and director, EPRA Elektrik Enerji ve İnş. Tic. Ltd. Şti, Turkey.
- **Jun. 1998 to Dec. 2012:**  
Chief R&D Engineer, TUBITAK UZAY, Power Systems Department, Ankara, TURKEY.

## RECENT KEY PROJECTS

- **Impact Assessment of Balancing Integration in the Black Sea Region**  
*Duration* : 2017 - Cont. NARUC USA  
*Function* : Project Manager
- **R&D Project for investigating aggregator concepts and market mechanism for DR services in Turkey (2017-PM)**  
*Duration* : 2017 - Cont. AKEDAS DSO Turkey  
*Function* : Project Manager
- **Distribution System Fault Analytics R&D Project**  
*Duration* : 2017 - Cont. ADM & GDZ DSO Turkey  
*Function* : Project Consultant
- **SFRA (Sweep Frequency Response Analysis) R&D Project**  
*Duration* : 2017 - Cont. KCETAŞ Turkey  
*Function* : Project Consultant
- **Investigation of Implementating Multi-time Distribution Charge Tariff R&D Project**  
*Duration* : 2017 - Cont. Başkent DSO Turkey  
*Function* : Project Consultant
- **Intelligent system for trading on wholesale electricity market (SMARTRADE), COMPETITIVENESS OPERATIONAL PROGRAMME 2014-2020, funded by European Funds ERDF**  
*Duration* : 2016-2020 COMPETITIVENESS OPERATIONAL PROGRAMME  
*Function* : Project Director 2014-2020, funded by European Funds ERDF
- **Efficient integration of wind and solar power in Turkey - A quantitative analysis of the Turkish power system: Transmission expansion needs and flexibility options**  
*Duration* : 2016 – Cont. Agora Energiewende & European Climate Foundation  
*Function* : Project Manager
- **Grid Contingency & Market Strategies Analysis for Kırıkkale NGCC Power Plant**  
*Duration* : 2016 GAMA Energy  
*Function* : Project Consultant
- **Development of transmission system dispatcher training simulator for Turkmenistan**  
*Duration* : 2016 Çalık Energy  
*Function* : Project Manager
- **Feasibility of supplying rural areas at 1kV in Turkey (R&D project)**  
*Duration* : 2016 ADM ve GDZ DSO.  
*Function* : Project Sponsor

## Dr. Osman Bülent Tör – RESUME (Nov. 2017)

- **Determination of optimum medium voltage level at power distribution considering locational characteristics of the power systems in Turkey (R&D project)**  
*Duration* : 2016  
*Function* : Project Sponsor ADM ve GDZ DSO
- **Development of a long-term planning optimization software to optimize investments at MV level (R&D project)**  
*Duration* : 2016  
*Function* : Project Manager Akdeniz DSO
- **Feasibility of utilizing a low voltage express feeder at distribution systems**  
*Duration* : 2016 - Cont.  
*Function* : Project Sponsor Başkent and Toroslar DSO
- **Distribution grid master plan project and software development for GIS, SCADA and AMR system integration with DigSilent PowerFactory software**  
*Duration* : 2016- Cont.  
*Function* : Project Manager GDZ DSO
- **Development of Security Constrained Unit Commitment algorithm and software**  
*Duration* : 2014 - 2015  
*Function* : Project Manager 1507 - TÜBİTAK R&D Support Program - Turkey
- **Grid master plan of Akdeniz DSO & Çamlıbel DSO in Turkey**  
*Duration* : 2014 - 2015  
*Function* : Project Manager DNV GL
- **Smart Grid Applications in Electricity Transmission Feasibility Study for TEIAS Turkey**  
*Duration* : 2014 – 2015  
*Function* : Project Manager ESTA International USA
- **Azerbaijan-Georgia-Turkey Interconnection Project NTC CGM Coord. & Investment Sensitivity Analyses**  
*Duration* : 2014  
*Function* : Project Manager USEA USA
- **Turkmenistan HV Electricity Grid Master Plan Project**  
*Duration* : 2014 - 2015  
*Function* : Project Manager Çalık Energy
- **Grid code compliance analyses for 5 wind turbine power plants in Turkey**  
*Duration* : 2013 - 2014  
*Function* : Project Manager Borusan EnBW
- **Developing a web based real time demand and price forecasting platform for distribution companies**  
*Duration* : 2013 - 2014  
*Function* : Project Manager of EPRA 1507 - TÜBİTAK Small and Medium Sized  
(Collaboration of EPRA and ENDOKS) Enterprises R&D Support Program - Turkey
- **Feasibility analysis of Romania-Ukraine-Moldova transmission corridor**  
*Duration* : 2013  
*Function* : Project Manager USEA (United States Energy Agency)
- **Grid compliance analysis and training for the connection of DGs to power distribution network**  
*Duration* : 2013  
*Function* : Project Manager TRAKYA Elektrik Dağıtım A.Ş.
- **Turbine/governor and generator/excitation system controller modeling and parameter optimization for a hydraulic and a natural gas combined cycle power plant in Colombia**  
*Duration* : 2012  
*Function* : Project Manager KUSPYDE INGENIERIA SAS (Colombia)
- **Consultancy and training for the master plan of the electric network of AKEDAS Electric Distribution Company.**  
*Duration* : 2012  
*Function* : Project Manager AKEDAS DSO
- **Turkey-ENTSO/E Interconnection Project (AVIKOR 201x)**  
*Duration* : Feb. 2011- Dec. 2012  
*Function* : Project Coordinator Consulting for TEIAS: Turkish Electricity Transmission Utility (European Interconnection Department)
- **Baskent Electricity Distribution Network Master Planning**  
*Duration* : Feb. 2010 – June 2011  
*Function* : Project Manager of TUBITAK UZAY International Consulting for Mercados Electricity Market
- **Rehabilitation of Electricity Distribution Network of Turkish Air Force Academy**  
*Duration* : Dec. 2008 – Nov. 2009  
*Function* : Project Engineer and Controller for Turkish Air Force (as sub-lieutenant)
- **National Power Quality Project (Reactive power compensation and harmonics)**  
*Duration* : March 2006 – Dec. 2009  
*Function* : Power System Analyst for TEIAS: Turkish Electricity Transmission Utility

### MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Chamber of Electrical Engineers of Turkey, Member, 1998-Present
- IEEE PES, Member.

### SPECIAL SKILLS

- Experience on implementing quality systems (ISO 9000):
  - ISO 9000: Internal Audit Educational Program, Ankara, Turkey, March 2001 (Internal Audit Certification),
  - ISO 9000: 2000 Quality Management System, Ankara, Turkey, January 2001 (Certification).
- Project Management Certificate by Kavlakoglu Management Institute, Ankara, Turkey, 2006.
- Engineering Economics course certificate from SATEM Turkey.

### PROFESSIONAL SOFTWARE EXPERIENCE

PSS/E (Power System Simulator for Engineers), DigSilent PF, EMTP (Electromagnetic Transient Prog.), ATP (Alternative Transient Prog - new version of EMTP), NEPLAN BPC, MATLAB, National Instruments LABVIEW, CPLEX.

### LANGUAGE PROFICIENCY

- Turkish (native language), English (fluent)

### RECENT KEY PUBLICATIONS

#### Journal Publications:

1. E. Ozguner, O. B. Tor, N. Guven, "Probabilistic day-ahead system marginal price forecast with ANN for Turkish Electricity Market," *Turkish Journal of Electrical Engineering & Computer Sciences*, (accepted).
2. A. Bara, S.V. Oprea, I. Simonca, O.B.Tör, "Conceptual design and architecture of an informatics solution for smart trading on wholesale energy market in Romania," *Database Systems Journal*, vol. VII, no. 4/2016
3. S.V.Oprea, A.Bara, M.E.Cebeci, O.B.Tör, "Promoting peak shaving while minimizing electricity consumption payment for residential consumers by using storage devices," *Turkish Journal of Electrical Engineering & Computer Sciences*, 2017 (25) 3725-3737 (doi:10.3906/elk-1606-152).
4. O.B.Tör, M.E.Cebeci, M.Koç, A.N.Güven, "Dynamic Optimization of Long Term Primary Electric Distribution Network Investments based on Planning Metrics," *Journal of the Faculty of Engineering and Architecture of Gazi University*, (accepted).
5. Ö. Tanıdır, O. B. Tör, "Accuracy of ANN based day-ahead load forecasting in Turkish power system: degrading and improving factors," *Neural Network World*, 4/15, pp. 443-456, 2015.
6. O. B. Tör, "Separation of Power Systems into a Unique Set of Zones based on Transmission Usage of Network Tariffs and Transmission Loss Tariffs," *International Journal of Electrical Power & Energy Systems*, Elsevier, Volume 69, July 2015, pp. 367–379.
7. O. B. Tor, A. N. Guven, M. Shahidehpour, "Promoting the Investment on IPPs for Optimal Grid Planning," *IEEE Trans. on Power Systems*, vol. 25 no. 3, pp. 1743-1750, Aug. 2010.
8. O. B. Tor, A. N. Guven, M. Shahidehpour, "Congestion-Driven Transmission Planning Considering the Impact of Generator Expansion," *IEEE Trans. on Power Systems*, vol. 23 no. 2, pp. 781-789, May 2008.
9. O. B. Tor, "Electricity Restructuring in Turkey: Promises and Predicaments" *IEEE Power & Energy Magazine*, Vol. 3, Issue 3, May-June 2005, pp. 25-29.

#### Conference Papers:

1. A.Okuslug, A.N.Guven, O.B.Tör, A.Bara, "Price Based Unit Commitment For Bidding Strategies In Turkish Market Under Unit And System Constraints," 8th International Conference on Energy and Environment CIEM 2017 (accepted)
2. A. Bara, S.V. Oprea, A. Uta, O.B.Tör, M.E.Cebeci, "Informatics Solutions for Smart Trading on Energy Wholesale Markets Containing RES Bidders," *International Conference on Computer Systems and Technologies*, CompSysTech 2017.
3. N. Kaş, O. B. Tör, M. E. Cebeci, M.Göktepe, E. Kalkan, A. Gündoğdu, S.C. Yılmaz, A. N. Güven, "Theoretical and Practical Aspects of Implementing a Low Voltage Express Feeder between Nearby Distribution Transformers to Reduce Annual Losses", IEEE PES ICSG İstanbul, 2017.
4. M. Koç, O. B. Tör, M. E. Cebeci, F.Güler, H. G. Taşkın, A. Tuncer, U. Okul, A. N. Güven, "Optimization of long-term investments of electric distribution systems considering planing metrics", IEEE PES ICSG İstanbul, 2017.
5. K. Özen, O. B. Tör, M. E. Cebeci, G. Batar, A. Kılıç, Ü. Türkmen and A. N. Güven, "Implementation of 1 kV on LV feeders: a smart alternative to MV line investment to solve voltage drop problems at LV systems," in IEEE PES ICSG 2017, İstanbul, 2017.
6. F. Tursun, M. E. Cebeci, O. B. Tör, A. Şahin, H. G. Taşkın, A. N. Güven, "Determination of zonal power demand S-curves with GA based on top-to-bottom and end-use approaches," IEEE PES ICSG 2016, (best paper award).
7. I. Elma, O. B. Tor, "Impact of Wind Penetration Level on Optimum Transmission Planning," *IET Renewable Power Generation Conference*, Edinburgh, Sep. 2011.
8. M. E. Cebeci, S. Eren, O. B. Tor, A. N. Guven. "Transmission and Substation Expansion Planning using Mixed Integer Programming, IEEE PES, 43<sup>rd</sup> North American Power Symposium, Northeastern University, Boston, USA, August 4-6, 2011.
9. M. O. Tulaz, S. K. Reyhan, O. B. Tor, "Distribution Substation Optimization at Primary Distribution Network Planning and Visualization of the Results," IEEE PES, 43<sup>rd</sup> North American Power Symposium, Northeastern University, Boston, USA, August 4-6, 2011.
10. N.O. Cetin, Z. Ozkan, O.B. Tor, "Arbitrage opportunities between energy, bilateral contracts and ancillary service markets," ELECO 2011, 7th International Conference on Electrical and Electronics Engineering, 1-4 December 2011, Bursa, Turkey, pp. 43-48.
11. O. B. Tör, A. N. Güven, "Providing Locational Market Signals in the Context of Coordinated Multi-Year Transmission Expansion Planning", IEEE PES, ELECO 2007, Bursa, Turkey, Dec. 2007.
12. O. B. Tor and M. Shahidehpour, "Power Distribution Asset Management" *IEEE PES General Meeting*, Montreal, Canada, June 2006.