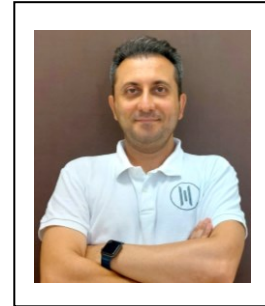


## ICSMARTGRID 2025

### 13TH INTERNATIONAL CONFERENCE ON SMART GRID

#### **Dr. Elyas Rakhshani**

HESStec Valencia, Spain



#### **Bio**

Dr. Elyas Rakhshani is the Control Systems and Simulation Manager at HESStec, based in Valencia, Spain. He leads the Control Systems division within the company's Technology Department, focusing on dynamic low-inertia grids, hybrid energy storage integration, and the development of advanced control algorithms. His work ensures the seamless integration of storage dynamics with system operations, optimizing performance through HESStec's control and power platforms.

Before joining HESStec, Dr. Rakhshani worked at ABB Power Grids as a Senior Power System Consultant, specializing in stability analysis of low-inertia systems and the grid integration of renewable energy sources. Prior to that, he was a Postdoctoral Research Engineer at the IEPG Research Center, Delft University of Technology (TU Delft), Netherlands, contributing to European H2020 projects on grid code assessment, control, and dynamic stability analysis of low-inertia power systems. His research in this field explored the integration of wind power and hybrid energy storage systems (ultra-capacitors and batteries), considering the future transition scenarios of European grids.

From 2013 to 2016, he worked as a Junior Research Engineer in Abengoa's Research Department in Seville, Spain, focusing on power electronics applications in modern flexible energy systems.

Dr. Rakhshani earned his Ph.D. in Electrical Engineering (cum laude) from the Universitat Politècnica de Catalunya (UPC) in 2016, receiving the Extraordinary Doctoral Award from the UPC Doctoral School in 2018 in recognition of his scientific contributions. He also holds a Master's degree in Control Systems (2008) and a Bachelor's degree in Power Systems (2004).

Dr. Elyas Rakhshani is a Senior Member of IEEE and serves on the editorial boards of leading Power and Energy Society (PES) journals, including IEEE Transactions on

Power Systems, IEEE Power Engineering Letters, IET Generation Transmission & Distribution, IET Renewable Power Generation, and IEEE Systems Journal. His research interests span modern power system control, dynamic stability, hybrid energy storage integration, converter control applications in power systems, and HVDC control for grid applications.

As part of his research and professional activities, Dr. Rakhshani has published over 100 papers and technical reports, contributing significantly to the advancement of power system dynamics and control..