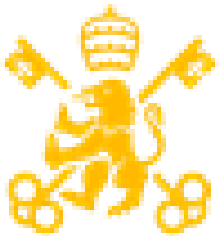
ELEKTROINŠTITUT MILAN VIDMAR



COMILLAS

UNIVERSIDAD PONTIFICIA

ICAI ICADE CIHS

Presentation of Comillas University & Instituto de Investigación Tecnológica

IIT is a multidisciplinary institute highly active in the fields of modelling and analysis of complex systems, regulation and policy, fundamentally applied to energy and transportation sectors.

116 researchers

44 predoctoral trainees

68 professors & senior researchers

4 postdoctoral researchers

Around **150 projects** per year

276 publications for the 4-year period 2016-19

+3000 citations for the 4-year period 2016-19

19 M€ turnover in the last four years

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Relevant projects:

- Criteria and methods for distributed generation charges in Costa Rica, 2020
- Computational model to analyse the response of consumers to prices and charges in an environment of decarbonisation, decentralization and digitalization of electrical systems , 2019-2020
- Upgrading of electricity tariff structure for Costa Rica, 2019
- Tariffs, Jamaica, 2018
- Preliminary methodology for electricity network charges and other regulated charges for Spain, 2018
- DSO Observatory: Study and systematic investigation for distribution system operators in the field of smart grid project development", completed in the period November 2014 - November 2015

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Relevant publications :

1. Journal publications

- N. Morell, J.P. Chaves, T. Gómez. Revisiting electricity network tariffs in a context of decarbonization, digitalization, and decentralization. Energies. vol. 13, no. 12, pp. 3111-1-3111-21, Junio 2020. [Online: Junio 2020] JCR 2.707 - Q3 (2018)
- C. Mosacula, J.P. Chaves, J. Reneses. Reviewing the design of natural gas network charges considering regulatory principles as guiding criteria in the context of the increasing interrelation of energy carriers. Energy Policy. vol. 126, pp. 545-557, Marzo 2019. [Online: Diciembre 2018] JCR 4.880 - Q1 (2018)
- I. Abdelmotteleb, T. Gómez, J.P. Chaves, J. Reneses. Designing efficient distribution network charges in the context of active customers. Applied Energy. vol. 210, pp. 815-826, Enero 2018. [Online: Septiembre 2017] JCR 8.426 - Q1 (2018); 8.426 - Q1 (2018)
- I. Abdelmotteleb, T. Gómez, J. Reneses. Evaluation methodology for tariff design under escalating penetrations of Distributed Energy Resources. Energies. vol. 10, no. 6, pp. 778-1-778-16, June 2017. [Online: June 2017] JCR 2.676 - Q3 (2017); 2.707 - Q3 (2018)
- J. Reneses, T. Gómez, J. Rivier, J.L. Angarita. Electricity tariff design for transition economies: application to the Libyan power system. Energy Economics. vol. 33, no. 1, pp. 33-43, January 2011. JCR Q1 (2011); 4.151 - Q1 (2018)

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Relevant publications :

2. PhD thesis

- Abdelmotteleb (2018), Designing electricity distribution network charges for an efficient integration of distributed energy resources and customer response. Universidad Pontificia Comillas. Madrid (Spain).

3. Book chapters

- I. Abdelmotteleb, T. Gómez, J.P. Chaves, New distribution network charges for new integrated network services, in Consumer, prosumer, prosumager: how service innovations will disrupt the utility business model. Editores Sioshansi, Fereidoon P.. Ed. Academic Press. Cambridge, United States of America, 2019.

4. Technical reports

- I.J. Pérez-Arriaga, C. Batlle, T. Gómez, J.P. Chaves, P. Rodilla, I. Herrero, P. Dueñas, C.R. Vergara Ramírez, A. Bharatkumar, S. Burger, S. Huntington, J. D. Jenkins, M. Luke, R. Miller, Utility of the future: an MIT Energy Initiative response to an industry in transition. Project: UOF-MIT. Funded by Consorcio de empresas. Dec/2016.

Comillas Team

Professor Dr. **Tomás Gómez San Román**

- Project manager and/or principal investigator in +80 research projects
- +100 articles in electrical power sector
- Former commissioner at the Spanish Energy Commission

Researcher Professor Dr. **José Pablo Chaves Ávila**

- Current deputy director at IIT
- + 40 research projects
- +30 articles in electrical power sector

MSc. **Nicolás Morell Dameto**

- Master in Electricity Markets from Illinois Institute of Technology
- Master in Industrial Engineering from Universidad Politécnica de Madrid

Elektroinšitut Milan Vidmar

Elektroinštitut Milan Vidmar (EIMV) is the leading Slovenian engineering and scientific research organisation acting in the area of electric power engineering. From the economic and technological perspective, it addresses the issues of generation, transmission and distribution of electricity. The experts at the institute prepare feasibility and implementation studies, expert reports, they implement technological, environmental and other analyses, inspect the quality and operation of electric power systems and facilities as required by electric power utilities, ministries and national as well as regional authorities.

Key numbers:

15.000 library literature units
2.500 implemented expert studies
80 experts
70 years present in R&D
6 experts departments
3 accredited laboratories

www.eimv.si

Elektroinšitut Milan Vidmar

Relevant projects:

- Designing eTrading Solutions for Electricity Balancing and Redispatching in Europe, FutureFlow, 2016-2019, European Union's Horizon 2020 research
- Študija izvedljivosti posodobitve inovacijskih procesov elektroenergetike: Generator Inovativnih Tehnoloških Energetskih Rešitev 2019,2020 SLO
- Posodobitev metodoloških izhodišč za pripravo določanja cen in zagotavljanja sistemskih storitev zaradi razvoja trga, 2019 SLO
- NEDO: Demand response (peak shaving): critical network analyses and report on network conditions for the substation Breg: study no. 2370
- NEDO WG 3: Report on Testing Results: study no. 2419, 2018
- Metodologija in primer izračuna KPI povečanje deleža razpršenih virov v omrežju, 2017 SLO

Elektroinšitut Milan Vidmar

Relevant projects:

- TDX- ASSIST - Coordination of Transmission and Distribution data eXchanges for renewables integration in the European marketplace through Advanced, Scalable and Secure ICT Systems and Tools, 2020 European Union's Horizon 2020 research
- Izračun cene priključitve na električno omrežje in obravnava priključitve razpršenih virov, ref.št.2018, 2011
- Razvoj porabe električne energije in koničnih obremenitev na področju Elektro Ljubljana, študija št. 2071, 2012

Relevant projects on tariffs:

- Izračun faktorjev povprečnih stroškov priključevanja odjemalcev na električno omrežje, ref. št. 1597, 2003.
- Dopolnitev metode za obračunavanje prenosa in distribucije električne energije v Sloveniji, ref. št. 1644, 2004.

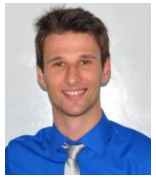
Elektroinšitut Milan Vidmar Team

Andreja Ivartnik Kanduč, M.Sc.E.E.

- Master of Science in Power Engineering
- EU Electricity Network Codes Master level
- Certificate of Excellence EU Clean Energy Package

Igor Podbelšek, M.Sc.E.E., MBA

- Experienced manager in power utility business
- Master of Science in Power Engineering
- Master of Business Administration



Miha Grabnar, B.Sc.E.E.

- AI Researcher and Project manager
- PhD candidate

Maja Kernjak Jager, MSc

- Master of Business Studies
- Researcher and project coordinator
- Works in the field of economics

Miloš Maksić, Ph.D.

- Ph.D. in Power Engineering
- Researcher and Project manager

Timotej Kodek, Ph.D.

- Doctor of Science in Electrical Engineering
- Power utility IT integration researcher and project manager