

Camilo Andrés Gallego Arias

EDUCATIONAL EXPERIENCE

PhD in Economics September 2016 – present
University of Massachusetts, Amherst

M.Sc. in Electrical Engineering January 2009 – December 2011
Technological University of Pereira, Colombia
Field of study: competition in energy markets and power system expansion planning
Thesis/project: Proposals to improve the market power analysis in the Colombian wholesale electricity market demand curve and the spot price formation.

B.A. in Electrical Engineering June 2004 – February 2009
Technological University of Pereira, Colombia
Thesis/project: Analysis of current practices for detecting market power in Colombia's wholesale power market.

PROFESSIONAL EXPERIENCE

Energy Policy Advisor of the Deputy Minister of Energy in Colombia September 2015 – April 2016
Ministry of Mines and Energy, Colombia

- Analysis of the gas and electricity market fundamentals in order to propose policy energy regulations to encourage competition and benefits to the final users.
- Promoting the gas and electricity market during the phenomena El Niño under market competition criteria.
- Promoting the expansion and new investment in the Colombian generation power system.

Energy Regulatory Advisor August 2011 – September 2015
The National Energy and Gas Regulatory Commission

- Competition policies to prevent abuse of market power.
- Analysis of the forward contract electricity market.
- Design of the international energy transactions in the Andean Community of Nations.
- Analysis of the reliability criteria of the independent market system operator.
- Firm energy calculation of renewable and non-renewable power generation.

RESEARCH EXPERIENCE

Graduate Student Research

October 2009 – September 2011

Technological University of Pereira

Project thesis: Proposals to improve the market power analysis in the Colombian wholesale electricity market based on demand curve and the spot price formation.

Advisor: Harold Salazar Isaza, Ph.D.

Undergraduate Student Research

January 2008 – January 2009

Technological University of Pereira

Project thesis: Analysis of current practices for detecting market power in Colombia's wholesale power market.

Advisor: Harold Salazar Isaza, Ph.D.

Graduate Researcher – young researcher program

February 2010 – July 2011

National Department of Science and Technology (COLCIENCIAS)

- Analysis of market power in wholesale electricity markets.
- Equilibrium models applied in hydrothermal electricity markets.

Graduate Researcher

March 2010 – July 2010

Technological University of Pereira

- Analysis of the economic incentives in the implementation of non-technical power losses program.
- Development of software to determine the optimal path for the non-technical power losses program.

TEACHING EXPERIENCE

Professor

August 2009 – May 2010

Technological University of Pereira

Course: Power Generation Systems

- Economic dispatch of hydrothermal units and methods of solutions.
- Optimal power flow.

PUBLICATIONS

- Camilo Gallego, Harold Salazar, Ramón Gallego. *Analysis of Current Practices for Detecting Market Power in Wholesale Power Market in Colombia*. Revista Facultad de

Ingeniería de la Universidad de Antioquia. Revista edición 59. Junio de 2011.
http://www.scielo.org.co/scielo.php?pid=S012062302011000300012&script=sci_arttext

- Javier Díaz, Camilo Torres, Camilo Gallego, Harold Salazar. *Two in one: the experience of the Colombian Electricity Sector to Encourage Renewable Energies*. 2014 IEEE Power & Energy Society – General Meeting.

SCHOLARSHIPS AND AWARDS

- Outstanding M.S.c final thesis/project qualification. September 2011.
- Best research project among more than 1000 researches in Colombia by COLCIENCIAS. May 2011. <http://www.mineducacion.gov.co/cvn/1665/w3-article-272301.html>
- Member of technical committee of evaluation. IEEE ANDESCON 2010: Green Technologies for a Better World. September 2010.
- Scholarship for graduate studies. Technological University of Pereira. March 2009 – August 2010.
- Graduation with honors. Electrical engineering. Technological University of Pereira. February 2009.
- Outstanding B.A final thesis/project qualification. January 2009.

ADDITIONAL COURSEWORK

- Sustainable Energy Training for Latin America. Santiago de Chile. November 2014.
- The Colombian Power System Security Operation. Medellin, Colombia. July 2012.
- Portfolio risk analysis. The Colombian Securities Exchange (BVC). Bogotá, July 2009.

SKILLS

- Programming languages: Matlab, GAMS, Visual Basic.
- Language skills: Spanish, English.