## JUAN ROSELLÓN



## **BIOGRAPHY** (October 2014)

Juan Rosellón is tenured Professor (on sabbatical) at the Department of Economics of the Centro de Investigación y Docencia Económicas (CIDE) in Mexico City, and Research Associate at the German Institute for Economic Research (DIW-Berlin). Since September 2014, he is also Independent Advisor of the Mexican electricity Independent System (CENACE), by appointment from the President of Mexico. During 2010-2012 he was as Visiting Scholar at the Technische Universität Berlin (TU Berlin), and Research Professor at DIW Berlin. He has also been a Visiting Professor at the Chair of Energy Economics and Public Sector Management of the Technische Universität Dresden (EE2) during 2007-2010, Visiting Researcher at the Kennedy School of Government of Harvard University since 2002, as well as External Academic Advisor at the School of Engineering of the National Autonomous University of Mexico (UNAM) during 2006-2012. Professor Rosellón is an international expert on economic regulation of energy networks. The European Union awarded him in 2012 with a Marie-Curie International Incoming Fellowship. His proposal, RES Grid Integration, obtained the highest score in the area of Economics (only four economics proposals were finally funded among more than 4,000 total proposals). Also in 2012, he was part of the research team of DIW Berlin that obtained a substantial grant from the Mercator Foundation to carry out research on large-scale renewable integration in Germany. In February 2009, he was awarded with the 4<sup>th</sup> Reimut Jochimsen Prize by the Deutsche Bundesbank (German Central Bank). Likewise, he won in 2008 the Georg Forster Fellowship from the Humboldt Foundation to support research visits to Germany from 2009-2012. He was Repsol-YPF-Harvard-Kennedy-School Fellow at the Kennedy School of Harvard University from 2003-2005. During 2002-2003, he was as well Senior Fellow at the Kennedy School as a Fulbright Scholar. At CIDE he leads a research network on applied regulatory economics that has received research grants from El Colegio de México (PIERAN), the Mexican Energy Regulatory Commission (CRE), the Mexican Science and Technology Foundation (CONACYT), the Rand Corporation, the World Bank, the Inter-American Development Bank, the Tinker Foundation. Stanford University, and the Naumann Foundation. Professor Rosellón was also the Director of CIDE's Workshop on Energy Economics and Regulation aimed to train Mexican government officials in the energy sector from 1998-2001. Additionally, Rosellón was selected as a member of the Editorial Board of Economics of Energy & Environmental Policy, the newest refereed journal of the International Association for Energy Economics (IAEE), and is also the Editor of Economía Mexicana (Nueva Época), one of the leading economics journals (SSCI) in Latin America. Rosellón recently achieved the transformation of this last journal into a leading economics journal in Latin America, Latin American Economic Review, due to be published by Springer Verlag by 2014. Rosellón was as well Secretary of the Mexican Chapter of the IAEE (1999-2001), and member of its advisory board since October 2001. He was Chief Economist at CRE (1995-1997) during which time he had a leading participation in all economic policy decisions regarding the regulatory reform process of the Mexican natural gas and electricity sectors. He was a faculty member of the Program on Privatization, Regulatory Reform and Corporate Governance at Harvard University (1997-2000), and at Princeton University (2001). He is member of the Mexican National System of Researchers (SNI) since 1994. He currently holds level III at SNI (level III is the highest level). In 1994, he received the National Award in Economics (Premio Nacional de Economía, Juan F. Novola) from Mexican president Ernesto Zedillo. Professor Rosellón earned his Ph.D and M.A degrees in Economics from Rice University. He also obtained M.Sc and B.Sc degrees in Mathematics, as well as a B.A degree in Economics (UNAM). He won the Gabino Barreda Medal, the most important student honor granted by UNAM. He is also biographee of Who's Who in the World, Who's Who in Science and Engineering, and Who's Who in America. Juan Rosellón has achieved around 110 publications (see below) on regulatory and energy economics, and has presented his work in more than 120 international seminars and congresses. As of August 2014, he ranks among the most productive academic economists in Mexico (top 6%) and the Central American and Caribbean region (top 6%) of the IDEAS-RePEc database. Likewise, Rosellón was the last decade one of only eight authors in Mexico ranked among the most productive in the country

considering any possible ranking criteria, such as Conacyt, Kiel, and JCR (Arteaga-García, J. L. and D. Flores-Curiel, 2013, *La producción científica de los economistas académicos en México entre 2000 y 2010, Economía Mexicana. Nueva Época*, vol. XXII, no. 1).

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## PUBLICATIONS

Published Papers in International Refereed Journals (Social Science Citation Index)

- "Removing Cross-Border Capacity Bottlenecks in the European Natural Gas Market: A Proposed Merchant-Regulatory Mechanism," *Networks and Spatial Economics*, ISSN: 1572-9427 (with A. Neumann and H. Weigt), *accepted for publication*.
- "Regulated Expansion of Electricity Transmission Networks: The Effects of Fluctuating Demand and Wind Generation," *Journal of Regulatory Economics*, ISSN: 0922-680X (Print) 1573-0468 (Online) (with W.P. Schill and J. Egerer), *accepted for publication*.
- 3. "Power System Transformation towards Renewables: An Evaluation of Regulatory Approaches for Network Expansion," *The Energy Journal*, ISSN: 0195-6574 (with W.P. Schill and J. Egerer), *accepted for publication*.
- On Distributive Effects of Optimal Regulation for Power Grid Expansion, Energy Policy, Article in Press, 2014, ISSN: 0301-4215, Imprint: ELSEVIER (with L. Herrera) available online at: http://www.sciencedirect.com/science/article/pii/S0301421514001001.
- "Transmission Investment in the Peruvian Electricity Market: Theory and Applications," *Energy Policy*, Vol. 47, Issue 99, pp. 238-245, 2012, ISSN: 0301-4215, Imprint: ELSEVIER (with E. Ruiz).
- 6. "Long-run cost functions for electricity transmission," *The Energy Journal*, vol. 33, no. 1, 2012, ISSN: 0195-6574 (with I. Vogelsang and H. Weigt). <u>Top Ten SSRN download list for: Randomized Social Experiments; Econometric Modeling in Microeconomics; Networks; Regulation; Energy Policy; Primary Taxonomy (December 27th). Top ten SSRN download list for Econometric Modeling in Microeconomics (December 31st, 2009). Top ten SSRN download list for Randomized Social Experiments (January 3rd, 2010). Top ten SSRN download list for Energy Policy. (December 30th, 2010).</u>
- "Expansión de las Redes de Transmisión Eléctrica en Norteamérica: Teoría y Aplicaciones", *El Trimestre Económico*, vol. LXXIX (3), núm. 315, julioseptiembre, 2012, ISSN: 0041-3011 (with E. Zenón).
- "El modelo HRV para expansión óptima de redes de transmisión: una aplicación a la red eléctrica de Ontario," *Economía Mexicana. Nueva Época*, vol. XXI, no. 1, pp. 133-173, **2012**, ISSN 1665-2045 (with. J Tregear and E. Zenón).
- "Lumpy Investment in Regulated Natural Gas Pipelines: an Application of the Theory of the Second Best," *Networks and Spatial Economics*, 11:533–553, 2011, ISSN: 1572-9427 (with D.L. Brito).
- 10. "Incentives for Transmission Investment in the PJM Electricity Market: FTRs or Regulation (or both?)," *Utilities Policy*, Volume 19, Issue 1, January, Pages 3-13, **2011** (with Myslikova, Z. and E. Zenón). <u>Top Ten SSRN download list for: Energy Policy (Sub-Topic) and Transportation Science eJournal(September 10th, 2010). Top Ten SSRN download list for: Transportation Science eJournal (and December 30th, 2010).</u>
- "A Dynamic Incentive Mechanism for Transmission Expansion in Electricity Networks–Theory, Modeling and Application", *The Energy Journal*, Vol. 32, No. 1, pp. 119-148, **2011**, ISSN: 0195-6574 (with Hannes Weigt).

Winner of the 4th Reimut Jochimsen Prize, awarded by the German Central Bank: "European Infrastructure Policy, Challenges for Future Energy Markets in the European Community." Top Ten SSRN download list for: Theory: Networks, Other (April 2008).

- "Strategic Behavior and International Benchmarking for Monopoly Price Regulation: The Case of Mexico," Zeitschrift für Energiewirtschaft (German Journal of Energy Economics, Springer, Volume 34, Number 3, pp. 163-177, ISSN: 0343-5377 (Print) 1866-2765 (Online), 2010 (with D.L. Brito), (Non SSCI).
- "Toward a Combined Merchant-Regulatory Mechanism for Electricity Transmission Expansion," *Journal of Regulatory Economics*, Vol. 38, No. 2, 113-143, 2010, ISSN: 0922-680X (Print) 1573-0468 (Online) (with William W. Hogan, and Ingo Vogelsang).
- 14. "Merchant Electricity Transmission Expansion: A European Case Study," *Energy*, Volume 35, Issue 10, October **2010**, Pages 4107-4115, ISSN: 0360-5442 (with Tarjei Kristiansen) (ISI).
- "Pricing Natural Gas in Mexico: An Application of the Little-Mirrlees Rule the Case of Quasi-Rents, *Southern Economic Journal*, 76(4), pp. 1131-1136, 2010, ISSN: 0038-4038 (with D.L. Brito).
- "Incentives for Supply Adequacy in Electricity Markets: An Application to the Mexican Power Sector," *Economía Mexicana. Nueva Época*, vol. XVIII, no. 2, pp. 249-282, 2009, ISSN 1665-2045 (with V. Carreón).
- "Investigación académica que sustenta la toma de decisiones: El convenio CIDE-CRE", *Gestión y Política Pública*, Vol. 17, Núm. 1, pp.71-99, primer semestre de 2008. ISSN: 1405-1079.
- "An Incentive Mechanism for Electricity Transmission Expansion in Mexico," *Energy Policy*, Vol. 35, Issue 5, pp. 3003-3014, May 2007, ISSN: 0301-4215, Imprint: ELSEVIER.
- "Different Approaches to Supply Adequacy in Electricity Markets," *Energy Studies Review*, volume 14, issue 2, pp. 101-130, 2006, ISSN: 0843-4379, (Non SSCI).
- "A Merchant Mechanism for Electricity Transmission Expansion," *Journal of Regulatory Economics*, vol. 29, no.2, pp. 167-193, March, 2006, ISSN: 0922-680X (Print) 1573-0468 (Online) (with Tarjei Kristiansen).
- "LNG in the Northwestern Coast of Mexico: Impact on Prices of Natural Gas in Both Sides of the U. S.-Mexico Border," *Frontera Norte*, no. 36, pp. 7-27, 2006, ISSN: 0187-7372 (with Sophie Meritet, Alberto Elizalde), (Non SSCI)..
- 22. "The Political Economy of Solar Energy, in Energy and Nanotechnology: Prospects for Solar Energy in the 21st Century, "*The James A. Baker III Institute for Public Policy*, pp. 1-16, Rice University, December, 2005 (Non SSCI). http://www.rice.edu/energy/publications/docs/NANO\_PotliticalEconSolarEnergy.pdf (with D.L. Brito)
- "Price Regulation in a Vertically Integrated Natural Gas Industry: The Case of Mexico," *The Review of Network Economics*, vol. 4, issue 1, pp. 75-92, March, 2005, ISSN: 1446-9022, http://www.rnejournal.com/index.html (with D.L. Brito).
- "Un Modelo de Equilibrio General para la Fijación de Precios del Gas Natural en México," *El Trimestre Económico*, vol. LXXII (2), Num. 286, pp. 391-408, abriljunio, 2005, ISSN: 0041-3011 (with D.L. Brito).
- 25. "Different Approaches Towards Electricity Transmission Expansion," *The Review* of *Network Economics*, vol. 2, issue 3, pp. 238-269, September 2003, ISSN: 1446-9022, http://www.rnejournal.com/index.html.
- "Regulation of Gas Marketing Activities in Mexico," *Estudios Económicos*, Vol.18, No.1 January-June, pp. 15-35, **2003**, ISSN: 0188-6916 (with D. L. Brito) (Non SSCI).
- "Pricing Natural Gas in Mexico; An Application of the Little Mirrlees Rule," *The Energy Journal*, Vol. 24, No. 3, pp. 81-93, 2002, ISSN: 0195-6574 (with D. L. Brito).

- "Pricing Natural Gas Distribution in Mexico," *Energy Economics*, Vol. 24, No. 3, pp. 231-248, May, **2002**, ISSN: 0140-9883, Imprint: NORTH-HOLLAND (with J. C. Ramírez).
- "Oportunidad de la Inversión en Gasoductos de GLP en México," *El Trimestre Económic*, Vol. 69 (4), No. 276, pp. 567-581, 2002, ISSN: 0041-3011 (with D. L. Brito).
- "La Reforma del Sector Eléctrico Mexicano: Recomendaciones de Política Pública," *Gestión y Política Pública*, Vol. XI, No. 2, pp. 243-299, 2002, ISSN: 1405-1079 (with V. Carreón).
- 31. "Una nota sobre la regulación del gas en México: Comentarios críticos," *El Trimestre Económico*, Vol. 69 (3), No. 275, pp. 435-441, January-March, 2002, ISSN: 0041-3011 (with D. L. Brito)
- "Regulatory Reform in Mexico' Natural Gas Industry. Liberalization in the Context of a Dominant Upstream Incumbent," *Policy Research Working Paper*, *The World Bank*, 2537, pp. 1-37, January 2001, http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=632633 (with J. Halpern) (Non SSCI).
- 33. "Designing Natural Gas Distribution Concession in a Megacity. Tradeoffs between Scale Economies and Information Disclosure in Mexico City," *Policy Research Working Paper*, *The World Bank*, 2538, pp. 1-26, January 2001, <u>http://ideas.repec.org/p/wbk/wbrwps/2538.html</u> (with J. Halpern) (Non SSCI)..
- 34. "Reglas de Origen y Análisis del Bienestar," *El Trimestre Económico*, Vol. LXVIII (1), No. 269, January-March, pp. 3-38, **2001**, ISSN: 0041-3011.
- "The Economics of Rules of Origin," *The Journal of International Trade and Economic Development*, Vol. 9, No. 4 December 2000, pp. 397-425, ISSN: 0963-8199 (print), 1469-9559 (online).
- "Pricing Liquid Petroleum Gas in Mexico," *Southern Economic Journal*, Vol. 66, No. 3, pp. 742-743, January **2000**, ISSN: 0038-4038 (with D.L. Brito and W. L. Littlejohn).
- "La Regulación de las Tarifas de Distribución del Gas Natural en México: Un Modelo Estocástico," *El Trimestre Económico*, Vol. LXVII (2), No. 266, pp. 239-276, April-June, **2000**, ISSN: 0041-3011 (with J. C. Ramírez).
- "Determinación de precios del gas licuado de petróleo en México," *El Trimestre Económico*, vol. LXVI(4), No. 264, pp. 763-780, October-December, 1999, ISSN: 0041-3011 (with D. L. Brito, and W. L. Littlejohn).
- "Price and Rate Regulation for the Mexican Natural Gas Industry: Comments on Policy Decisions", *Economía Mexicana. Nueva Época*, vol.II, no. 2, pp. 267-308, 1998, ISSN: 0185-0458.
- 40. "Temas Esenciales de La Economía de la Ciencia," *Investigación Económica*, UNAM, no. 223, pp. 125-158, enero-marzo, **1998**, ISSN: 0185-1667.
- "Regulatory Reform in Mexico's Gas Industry," *Revista de Análisis Económico*, ILADES/Georgetown University, vol. 10, No. 2, pp. 267-283, November, 1995, ISSN: 0716-5927. (Non SSCI).
- "Reglas de Origen de Tratados de Libre Comercio: Efectos sobre el uso de Factores Domésticos de la Producción," *Economía Mexicana. Nueva Época*, CIDE, vol. II, no. 1, pp. 61-92, México, January-June, **1994**, **ISSN:** 0185-0458.
- 43. "La Economía Elemental de las Reglas de Origen," *El Trimestre Económico*, F.C.E., No 231, pp. 481-496, **1991**, ISSN: 0041-3011 (with Raúl Ramos Tercero).

**Book Chapters** 

 "A Merchant Mechanism for Electricity Transmission Expansion," in Rosellón, J. and T. Kristiansen (eds.), <u>Financial Transmission Rights: Analysis, Experiences and</u> <u>Prospects</u>, Lecture Notes in Energy 7, **Springer Verlag**, 2013, ISBN: 978-1-44714786-2 (with T. Kristiansen) (previously published in Journal of Regulatory Economics, 2006).

- "Mechanisms for the Optimal Expansion of Electricity Transmission Networks," in Rosellón, J. and T. Kristiansen (eds.), <u>Financial Transmission Rights: Analysis,</u> <u>Experiences and Prospects</u>, Lecture Notes in Energy 7, **Springer Verlag**, **2013**, ISBN: 978-1-4471-4786-2 (with T. Kristiansen) (previously published as "IHEE", 2009).
- 46. "Incentives for Transmission Investment in the PJM Electricity Market: FTRs or Regulation (or both?),"," in Rosellón, J. and T. Kristiansen (eds.), <u>Financial</u> <u>Transmission Rights: Analysis, Experiences and Prospects</u>, Lecture Notes in Energy 7, **Springer Verlag**, **2013**, ISBN: 978-1-4471-4786-2 (with T. Kristiansen) (previously published in "Utilities Policy", 2011)
- "Chapert Eight: Mexico." In: George Anderson (editor), Oil and Gas Management and Revenues in Federations, Oxford University Press, 2012, ISBN 978-0-19-544732-3 (with V. Carreón-Rodríguez).
- "Economía de la Ciencia," In: Juan Carlos García-Bermejo (editor), <u>Enciclopedia</u> <u>Iberoamericana de Filosofia, Vol. 30. Sobre la Economía y sus Métodos</u>, Editorial Trotta, Madrid, Spain, 2009, ISBN: 978-84-9879-056-6.
- "Mechanisms for the Optimal Expansion of Electricity Transmission Networks," in <u>International Handbook on the Economics of Energy</u> (IHEE), Lester Hunt and Joanne Evans (editors), Edward Elgar Publishing, 2009, ISBN: 978-1-84720-352-6
- 50. "The Mexican Electricity Sector: Economic, Legal and Political Issues," in <u>The Political Economy of Power Sector Reform, The Experiences of Five Major Developing Countries</u>, David G. Victor and Thomas C. Heller (editors), **Cambridge University Press, 2007**, pp. 175-214,2007, (with V.G. Carreón, and A. Jimenez-San Vicente), ISBN-13: 9780521865029 | ISBN-10: 0521865026. (Preliminary version published in <u>Repsol YPF-Harvard Kennedy School Fellows 2003-2004 Research Papers</u>, William Hogan, editor, Cambridge, MA, Kennedy School of Government, Harvard University, April, 2005, <u>http://www.ksg.harvard.edu/m-rcbg/repsol\_ypf-ksg\_fellows/03-04\_research\_papers.pdf</u>).
- 51. "Strategic Behavior and the Pricing of Gas in Mexico," in <u>Repsol YPF-Harvard Kennedy School Fellows 2003-2004 Research Papers</u> William Hogan, editor, Cambridge, MA, Kennedy School of Government, Harvard University, April, 2005 (with D.L. Brito), <u>http://www.ksg.harvard.edu/m-rcbg/repsol\_ypf-ksg\_fellows/03-04\_research\_papers.pdf</u>.
- 52. "Implications of the Elasticity of Natural Gas in Mexico on Investment in Gas Pipelines and in Setting the Arbitrage Point," in <u>Repsol YPF-Harvard Kennedy</u> <u>School Fellows 2003-2004 Research Papers</u>, William Hogan, editor, Cambridge, MA, Kennedy School of Government, **Harvard University**, April, **2005** (with D.L. Brito), <u>http://www.ksg.harvard.edu/m-rcbg/repsol\_ypf-ksg\_fellows/03-04\_research\_papers.pdf.</u>
- 53. "Natural Gas Sector Review," in <u>Private Solutions for Infrastructure in México</u>, **The World Bank**, **PPIAF**, **2002**, ISBN: 0821354140.
- 54. "Incentivos para la Expansión de la Red de Transmisión Eléctrica en México Mediante la Regulación de Precios," in <u>La Realidad Económica Actual y sus</u> <u>Corrientes de Interpretación: Un Debate Inicial</u>, edited by UNAM/ Miguel Angel Porrúa, 2002 (with A. Nevárez), ISBN 970-701-306-0.
- 55. "El Modelo Principal-Agente en el Análisis de la Política Científica en Países en Desarrollo," en <u>Ciencia Económica y Economía de la Ciencia: Reflexiones filosófico-metodológicas</u>, edited by SIAME/FCE, 2001 (with B. de la Torre), ISBN: 84-375-0507-0.
- "Economic and Political Implications of New Developments in Thin Film Solar Technology," in <u>Global Warming: Science and Policy, Cambridge University Press</u>, 2000, (with D. L. Brito), Baker Institute for Public Policy, Rice University, <u>http://www.bakerinstitute.org/Pubs/faculty\_brito1.pdf</u>

Books

59. <u>Economía Pública: Teoría y aplicación en México</u> (Libro de Texto para Posgrado), Centro de Investigación y Docencia Económicas, **2013**, México (en dictamen)

57. "Alternativas de Regulación en el Sector Eléctrico," in La Reforma Estructural del Sector Eléctrico, edited by ITAM-Miguel Angel Porrúa, June 2000, ISBN:

58. "La Regulación de Precios y Tarifas para la Industria del Gas Natural en México," in <u>Transiciones Energéticas en México, Centro y Sudamérica</u>, **1999**, Segundo Congreso Nacional de la Asociación Mexicana para la Economía Energética, A. C., ISBN:

- 60. <u>Financial Transmission Rights: Analysis, Experiences and Prospects</u>, Lecture Notes in Energy 7, **Springer Verlag**, **2013**, ISBN: 978-1-4471-4786-2 (with T. Kristiansen, eds.).
- 61. <u>Different Approaches to Electricity Transmission Expansion in Mexico</u>, Centro de Investigación para el Desarrollo (CIDAC), Mexico, (bilingual version), ISBN: 978-968-9123-06-4, 2007.
- 62. <u>División Óptima de la Zona Metropolitana de la Ciudad de México para fines de</u> <u>Distribución de Gas Natural</u>, **CIDE-CRE-Limusa** coedition, **2000**, (Editor).

Working Papers

- 63. *FTR Allocations to Ease Transition to Nodal Pricing: An Application to the German Power System*, 2014, **DIW Berlin Discussion Papers**, 1418, DIW Berlin, German Institute for Economic Research (with F. Kunz and K. Neuhoff).
- 64. Power System Transformation towards Renewables: An Evaluation of Regulatory Approaches for Network Expansion, **2013, DIW Berlin Discussion Papers,** 1312, DIW Berlin, German Institute for Economic Research (with W.P. Schill and J. Egerer). <u>Top Ten SSRN download list for: Environment & Natural Resources eJournal, SRPN: Other</u> <u>Renewable Energy (Topic) and SRPN: Renewable Resources (Topic) (September 12th).</u>
- 65. On Distributive Effects of Optimal Regulation for Power Grid Expansion, 2013, DIW Berlin Discussion Papers, 1327, DIW Berlin, German Institute for Economic Research (with L. Herrera).
- 66. Oil and Gas in Mexico, 2012, CIDE, DTE 540 (with V. Carreón-Rodríguez).
- 67. *Transmission Investment in the Peruvian Electricity Market: Theory and Applications*, **2011**, **DIW Berlin Discussion Papers**, 1171, DIW Berlin, German Institute for Economic Research (with E. Ruiz).
- Removing Cross-Border Capacity Bottlenecks in the European Natural Gas Market: A Proposed Merchant-Regulatory Mechanism, 2011, DIW Berlin Discussion Papers, 1145, DIW Berlin, German Institute for Economic Research (with A. Neumann and H. Weigt).
- 69. Regulated Expansion of Electricity Transmission Networks: The Effects of Fluctuating Demand and Wind Generation, 2011, DIW Berlin Discussion Papers, 1109, DIW Berlin, German Institute for Economic Research (with W.P. Schill and J. Egerer).
- Strategic Behavior and International Benchmarking for Monopoly Price Regulation: The Case of Mexico, 2010, DIW Berlin Discussion Papers, 1034, DIW Berlin, German Institute for Economic Research (with D.L. Brito).
- Merchant Electricity Transmission Expansion: A European Case Study, 2010, DIW Berlin Discussion Papers, 1028, DIW Berlin, German Institute for Economic Research, (with Tarjei Kristiansen).
- 72. Pricing Natural Gas in Mexico: An Application of the Little Mirrlees Rule: The Case of Quasi-Rents, 2010, DIW Berlin Discussion Papers, 1027, DIW Berlin, German Institute for Economic Research (with D.L. Brito).

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968-36-7479-8.

- 73. Incentives for Transmission Investment in the PJM Electricity Market: FTRs or Regulation (or both?), 2010, DIW Berlin Discussion Papers, 1026, DIW Berlin, German Institute for Economic Research (with Myslikova, Z. and E. Zenón).
- 74. Toward a Combined Merchant-Regulatory Mechanism for Electricity Transmission Expansion, **2010**, **DIW Berlin Discussion Papers**, 1025, DIW Berlin, German Institute for Economic Research (with William Hogan, and Ingo Vogelsang).
- 75. Lumpy Investment in Regulated Natural Gas Pipelines: An Application of the Theory of the Second Best, **2010**, **DIW Berlin Discussion Papers**, 1024, DIW Berlin, German Institute for Economic Research (with D.L. Brito)
- Long-run cost functions for electricity transmission, 2010, DIW Berlin Discussion Papers, 1020, DIW Berlin, German Institute for Economic Research (with Vogelsang I., and H. Weigt).
- 77. A Dynamic Incentive Mechanism for Transmission Expansion in Electricity Networks – Theory, Modeling and Application, 2010, DIW Berlin Discussion Papers, 1019, DIW Berlin, German Institute for Economic Research (with Hannes Weigt).
- 78. El modelo HRV para expansión óptima de redes de transmisión: una aplicación a la red eléctrica de Ontario, **2010**, CIDE, **DTE 493**, (with. J. Tregear, E. Zenón), .
- 79. Expansión de las Redes de Transmisión Eléctrica en Norteamérica: Teoría y Aplicaciones, **2010**, CIDE, **DTE 479**, (with E. Zenón).
- The Hydrocarbon Sector in Mexico: from The Abundance to the Uncertain Future, 2009, CIDE, DTE 472 (with Carreón-Rodríguez, V., E. Zenón).
- 81. *The political Economy of Solar Energy*, **2006**, CIDE, E-357, (with Dagobert L. Brito)
- 82. *The Mexican Electricity Sector: Economic, Legal and Political Issues*, **2005**, CIDE, E-342, (with Víctor Carreón, and A. Jiménez).
- 83. Regulation of Natural Gas Pricing in Mexico, 2005, CIDE, E-337.
- LNG in the Northwestern Coast of Mexico: Impact on Prices of Natural Gas in Both Sides of the US-Mexico Border, 2005, CIDE, E-338 (with Sophie Meritet and Alberto Elizalde).
- 85. Incentives for Supply Adequacy in Electricity Markets: An Application to the Mexican Power Sector, 2005, CIDE, E-332, (with Víctor Carreón).
- 86. *Liquid Natural Gas and a New Policy for Pricing Gas in Mexico*, **2005**, CIDE, E-314 (with D.L. Brito)
- 87. Different Approaches to Supply Adequacy in Electricity Markets, 2004, CIDE, E-298.
- 88. Implications of the Elasticity of Natural Gas in Mexico on Investment in Gas Pipelines and in Setting the Arbitrage Point, 2004, CIDE, E-299 (with D.L. Brito).
- 89. A Merchant Mechanism for Electricity Transmission Expansion, 2003, CIDE, E-276 (with Tarjei Kristiansen).
- 90. Pricing electricity transmission in Mexico, 2003, CIDE, E-270.
- 91. Different Approaches Towards Electricity Transmission Expansion, 2003, CIDE, E-260
- 92. Mexican Electricity Sector: Economic, Legal and Political Issues, 2003, Center for Environmental Science and Policy, Stanford University, WP 05; also published as a CIDE working paper (with Víctor Carreón, and A. Jiménez).
- Privatization and Income Distribution in Mexico, 2003, Instituto de Políticas Públicas y Estudios del Desarrollo, Mexico, WP 2003-05 (with Luis Felipe López-Calva).
- 94. A Solar Power Export Project in Mexico for the Californian Electricity Market, Working Paper, E-230,CIDE, **2002** (with D. L. Brito).
- 95. *Pricing natural gas distribution in Mexico*, CIDE, E-229, **2002**, (with José C. Ramírez & Juan Rosellón).
- 96. A General Equilibrium Model of Pricing Natural Gas in México, Working Paper, E– 228, CIDE, 2002 (with Dagobert L. Brito).

- 97. On the Potential Distributive Impact of Electricity Reform in México, Working Paper, E -223, CIDE, **2001** (with Luis F. López Calva).
- 98. Incentives for Expansion of Electricity Supply and Capacity Reserves in the Mexican Electricity Sector, Working Paper, E 219, CIDE, **2001** (with Victor Carreón).
- 99. Incentivos para la Expansión de la Red de Transmisión Eléctrica en México Mediante la Regulación de Precios, Working paper, E- 210, CIDE, 2001 (with Armando Nevárez).
- 100. Economic and Political Implications of New Developments in Thin Film Solar Technology, Working Paper, E-201, CIDE, **2001** (with D.L. Brito).
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