

Publications

Key:

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|-----|-----------------------|----|----------------------|
| PR | Primary Research | CA | Commissioned Article |
| PRB | Peer Reviewed Book | WP | Working Paper |
| BR | Book Review | CP | Conference paper |
| JSI | Journal Special Issue | RA | Review Article |

Note an 'R' in front denotes 'refereed' – e.g. RPR Refereed Primary Research
 Indented entries denote chapters within preceding publication

2014 completed drafts:

Maria Dominguez and **William J. Nuttall**, Verification in a future Climate Change Treaty – technology and policy issues, Complex Design, Systems and Management Asia Conference, Singapore, December 2014 12 pages (submitted)

Morgan Bazilian, **William J. Nuttall**, April Lee and Giorgio Gualberti, and Constantine Samaras, *Energy and the Military: Convergence of Security, Economic and Environmental Decision Making*, RAND Working Paper Series, (final draft) RPR

Matt Rooney, **William Nuttall**, Nikolaos Kazantzis, *A Dynamic Model of the World Uranium Market and the Nuclear Fuel Cycle*, Resources Policy (submitted) RWP

LVN Goncalves, Ali Ahmad, GT Parks, **WJ Nuttall**, SJ Steer, *A Comparison of ADSR Concepts for Power Generation*, (draft working paper in preparation) WP

T Zhang, **WJ Nuttall**, *Virtualising the Market Patterns of Smart Metering Diffusion: Toward a Generic Consumer Decision Model for Agent Based Simulation* (draft) RWP & RPR

Raphael J. Heffron and **William J. Nuttall**, *Scotland, Nuclear Energy Policy and Independence*, chapter of: *Energy, Scotland and the 2014 Independence Debate*, K. Baker and G. Wood (Editors), Routledge UK (submitted) also associated EPRG Working Paper (submitted). Chapter of PRB and RWP

WJ Nuttall, BA Glowacki, S Krishnamurthy, *Next Steps for Hydrogen*, Institute of Physics Policy Brief (final draft) CA

WJ Nuttall, *Britain, Energy Policy and Nuclear Power*, report for IAEA Vienna (submitted) CA

Antoine Haarscher, Max Bruner, Javier Doblas, Ambroise Fargere, Stephen F. Ashley, and **William J. Nuttall**, *The Japanese Electricity System 15 months after March 11 2011*, draft EPRG working paper and journal article – ICE Energy (submitted)

Malcolm Grimston, Stephen F. Ashley and **William J. Nuttall**, *Japan's Electricity Challenges After Fukushima*, final draft for International Journal of Energy Research

Published work:

2014:

W.J. Nuttall, *Managing Nuclear Risk: Liability and Compensation*, Westminster Energy, Environment and Transport Forum: The Future of Nuclear Energy in the UK, 20 May 2014 – proceedings pp. 47-49. May 2014 CP.

W.J. Nuttall, *Small Nuclear Power – Written Evidence*, House of Commons Energy and Climate Change Committee, Inquiry: Small Nuclear Power, 2 September 2014, available online at: <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/energy-and-climate-change-committee/small-nuclear-power/written/8538.html> CA

B.A. Glowacki, W.J. Nuttall, E. Hanley, L. Kennedy, and D. O’Flynn, *Hydrogen Cryomagnetism for Decentralised Energy Management and Superconductivity*, Journal of Superconductivity and Novel Magnetism, DOI: 10.1007/s10948-014-2660-7 11 pages, August 2014 RPR

Ettore Bompard, Marcelo Masera and **William J. Nuttall**, *High Tension Electricity*, Technological Forecasting and Social Change [From Our Perspective] in-press, available online, RPR

W.J. Nuttall, *Extending the life of ageing nuclear reactors could help bridge the energy gap*, The Conversation, 5 June 2014, CA

William J. Nuttall and Peter Storey, *Technology and Policy Issues relating to Future developments in Research and Radioisotope Production Reactors*, Progress in Nuclear Energy, **77** (2014) 201-213 RPR

WJ Nuttall, *Technology and Policy Issues Shaping the Future of Nuclear Power in the UK*, paper commissioned for Korea Development Institute International Seminar on Nuclear Power Industry Economics and Policy, Seoul, Republic of Korea, January 2014, published in Conference Proceedings CA

Malcolm Grimston, **William J. Nuttall** and Geoff Vaughan, *The Siting of UK Nuclear Reactors*, Journal of Radiation Protection, **34** (2014) R1–R24 (doi:10.1088/0952-4746/34/2/R1) RRA

Eben Upton and **William J. Nuttall**, *Fuel Panics - Insights from spatial agent-based simulation*, IEEE Trans ITS, preprint available on-line from publisher RPR

SF Ashley, BA Lindley, GT Parks, **WJ Nuttall**, R Gregg, KW Hesketh, U Kannan, PD Krishnani, B Singh, A Thakur, M Cowper, A Talamo, *Fuel Cycle Modelling of Open Cycle Thorium-Fuelled Nuclear Energy Systems* Annals of Nuclear Energy, preprint available online from publisher RPR

2013: Simon French, Nikolaos Argyris, **William J. Nuttall**, John Moriarty, Philip J. Thomas, *The Early Phase of a Radiation Accident: Revisiting Thinking on Evacuation and Exclusion Zones*, Proceedings of 10th ISCRAM Conference (paper 255) available at: <http://www.iscramlive.org/portal/iscram2013theme03> RCP

William Nuttall, *Are We Really Running Out of Helium?* OU Research Video, Youtube: <http://www.youtube.com/watch?v=rrDj1k0Dw4g> 26 November 2013

William Nuttall, *British electricity-the role of nuclear power*, OU Research Video, Youtube: <http://www.youtube.com/watch?v=LeZV8LMtHZs> 22 October 2013

M.C. Grimston and **W.J. Nuttall**, *The Siting of UK Nuclear Power Installations*, EPRG Working Paper, Ref: 1321, RWP

Matthew Rooney, **William J. Nuttall**, Nikolas Kazantzis, *A System Dynamics Study of Uranium and the Nuclear Fuel Cycle*, Conference Proceedings 31st International Conference of the System Dynamics Society, Cambridge Mass. USA 21-25 July 2013, ISBN 978-935056-12-06, CP

Matthew Rooney, **William J. Nuttall**, Nikolas Kazantzis, *A System Dynamics Study of Uranium and the Nuclear Fuel Cycle*, EPRG Working Paper, Ref: 1319, RWP

William Nuttall, *Topic 6: People Quality of Life and the Environment* – in: Interdisciplinary Study, Benefits and Limitations of Nuclear Fission for a Low-Carbon Economy, European Economic and Social Committee, February 2013. CA

W.J. Nuttall, *Reflecting on the themes – a personal view*, SCK-CEN Proceedings of workshop *Exploring the Science, Politics and Ethics of Nuclear Technology Assessment*, Brussels, February 20-21 2013, CD-ROM CP

William Nuttall, *Hinkley C goes ahead, but future nuclear costs must fall*, The Conversation UK, 21 October 2013, 5.37pm BST. CA

William Nuttall, *Nuclear futures: tough decisions needed to keep Britain's lights on*, The Conversation UK, 22 May 2013, 6.37am BST. CA

Richard Clarke, **William Nuttall**, and Bartek Glowacki, *Endangered Helium: Bursting the Myth*, The Chemical Engineer, December 2013/January 2014, pp. 32-36. CA

Ettore Bompard, Marcelo Masera and **William Nuttall**, *Technology: New electricity grids must develop in sync*, Nature, Correspondence, **500**, 276 (15 August 2013) doi:10.1038/500276c CA

Eben Upton and **William J. Nuttall**, *Fuel Panics - Insights from spatial agent-based simulation*, EPRG Working Paper (Ref: 1305), RWP

IMEchE (one of several co-authors – none named), *UK Plutonium - the way forward*, Institution of Mechanical Engineers, Policy Statement CA
(<http://www.imeche.org/knowledge/policy/energy/policy/plutonium>)

Bartek A. Glowacki, **William J. Nuttall**, and Richard Clarke, *Beyond the Helium Conundrum*, IEEE Trans. Applied Superconductivity **23**, (3) 3 June 2013, 0500113, 13 pages. RCP

Stephen F. Ashley, Richard A. Fenner, **William J. Nuttall** and Geoffrey T. Parks, *Open Cycle Thorium-Uranium-Fuelled Nuclear Energy Systems*, ICE Proceedings Energy, **166**, EN2, May 2013, pp. 74-81. RPR

Reyyan Koc, Nikolaus K. Kazantzis, **William J. Nuttall** and Yi Hua Ma, *An Economic Evaluation Framework for Inherently Safe Membrane reactor Modules in the presence of Uncertainty*, Journal of Loss Prevention in the Process Industries, **26** (3) pp. 468-477 (2013)
<http://dx.doi.org/10.1016/j.jlp.2012.07.012> RPR

2012: Ettore Bompard, Steve Connors, Gianluca Fulli, Bei Han, Marcelo Masera, Anna Mengolini and **William J. Nuttall**, *Smart Energy Grids and Complexity Science*, JRC Scientific and Policy Reports, ISBN 978-92-79-27736-8, EUR 25626EN. CP

Ettore Bompard, Steve Connors, Gianluca Fulli, Bei Han, Marcelo Masera, Anna Mengolini and **William J. Nuttall**, *Future Smart Energy Systems Research Agenda*, Position Statement, IET_JRC, 19 July 2012, CP

Stephen F. Ashley, Geoffrey T. Parks, **William J. Nuttall**, Colin Boxall and Robin W. Grimes, *Thorium Fuel Has Risks*, Nature, **492**, pp. 31-33, 6 December 2012, RCA

R Scurlock, RH Clarke, BA Glowacki, and **WJ Nuttall**, *The Future of Helium? A Global Agency to Oversee Production, Storage, Supply and Use of Helium Gas and Liquid*, 12th Cryogenics IIR International Conference, Dresden, Germany, September 2012 CP

Reyyan Koc, Nikolaus K. Kazantzis, **William J. Nuttall** and Yi Hua Ma, *Economic Rationale for Safety Investment in Integrated Gasification Combined-Cycle Gas Turbine Membrane Reactor*

Modules, Process Safety and Environmental Protection, **90**, (5), pp. 436-450 (2012)
<http://dx.doi.org/10.1016/j.psep.2012.07.004>,) RPR and also EPRG Working Paper 1211 RWP

S.F. Ashley, **W.J. Nuttall**, G.T. Parks, A. Worrall, *On the Proliferation Resistance of Thorium-Uranium Nuclear Fuel*, Paper for UK Project on Nuclear Issues, Annual Conference 2012, Royal United Services Institute, London 10 May 2012 (available online) CP

S.F. Ashley, R.A. Fenner, **W.J. Nuttall**, G.T. Parks, *Sustainability Indicators for Appraising Open-Cycle Thorium Fuelled Nuclear Energy*, Electricity Policy Research Group Working Paper (Ref: 1217) RWP

William J. Nuttall, Richard H. Clarke and Bartek A. Glowacki, Comment: *Stop Squandering Helium*, *Nature*, **485** (7400) pp. 573-575, 31 May 2012. CA

SB Economides, CL Han, S Orowitsch, IM Scoullou, SM Skippon, **WJ Nuttall**, *Paradigm Shift for Future Mobility: a cross country analysis of behavioural policies*, *Procedia – social and behavioural Science*, Transport Research Arena – Europe 2012, **48**, pp. 2588-2596 (2012) CP

WJ Nuttall, RH Clarke and BA Glowacki (editors), *Future of Helium as a Natural Resource*, Routledge (2012) PRB

RH Clarke, **WJ Nuttall** and BA Glowacki, *Introduction*, chapter of book: *Future of Helium*, Editors: WJ Nuttall, RH Clarke and BA Glowacki, Routledge CA part of PRB

Zhiming Cai, RH Clarke and **WJ Nuttall**, *Helium Demand*, chapter of book: *Future of Helium*, Editors: WJ Nuttall, RH Clarke and BA Glowacki, Routledge RPR part of PRB

WJ Nuttall, Zhiming Cai, BA Glowacki, N Ward and RH Clarke, *Dynamics of the Helium Market*, chapter of book: *Future of Helium*, Editors: WJ Nuttall, RH Clarke and BA Glowacki, Routledge RPR part of PRB

WJ Nuttall, RH Clarke and BA Glowacki, *The Future of Helium*, concluding chapter of book: *Future of Helium*, Editors: WJ Nuttall, RH Clarke and BA Glowacki, Routledge CA part of PRB

William J. Sutherland; Laura Bellingan; Jim Bellingham; Jason Blackstock; Robert Bloomfield; Michael Bravo; Victoria Cadman; David Cleevly; Andy Clements; Anthony Cohen; David Cope; Arthur Daemrich; Cristina Devecchi; Laura Diaz Anadon; Simon Denegri; Robert Doubleday; Nicholas Dusic; Robert Evans; Wai Feng; Charles Godfray; Paul Harris; Sue Hartley; Alison Hester; John Holmes; Alan Hughes; Mike Hulme; Colin Irwin; Richard Jennings; Gary Kass; Peter Littlejohns; Theresa Marteau; Glenn McKee; Erik Millstone; **William J Nuttall**; Susan Owens; Miles Parker; Sarah Pearson; Judith Petts; Richard Ploszek; Andrew Pullin; Becky Purvis; Graeme Reid; John Robinson; Louise Shaxson; Leonor Sierra; Beck Smith; David Spiegelhalter; Jack Stilgoe; Andrew Stirling; Christopher Tyler; David Winickoff; Ron Zimmern, *A collaboratively-derived science-policy research agenda*, PLoS ONE, **7**, (3), e31824, pp. 1-5, March 2012 RPR

William J. Nuttall, *The ideal portfolio today and in 2030*, chapter of *EU Energy Innovation Policy Towards 2050*, Editors J-M Glachant, N. Ahner and L. Meeus, Claeys and Casteels Publishing, Deventer, The Netherlands, pp. 119-130 CA

Tao Zhang and **William J. Nuttall**, *An Agent-Based Simulation of Smart Metering technology Adoption*, International Journal of Agent Technologies and Systems, **4** (1) pp. 17-38, April-June 2012 RPR

William J. Nuttall, *Nuclear Power and Large-Scale Renewables in Liberalized Power Markets A British and European Perspective*, White Paper G in *Managing Large-Scale Penetration of Intermittent Renewables*, Proceedings of MIT Energy Initiative Symposium, Cambridge Mass. USA 20 April 2011, published March 2012 CP

2011: Steer, S. J., Cardin, M.-A., **Nuttall, W. J.**, Parks, G. T., & Goncalves, L. V. N. *Minimising the economic cost and risk to accelerator-driven subcritical reactor technology: The case of designing for flexibility: Part 1*. Nuclear Engineering and Design, **243**, pp. 135-147, (2012). doi:10.1016/j.nucengdes.2011.11.027 RPR

Cardin, M.-A., Steer, S. J., **Nuttall, W. J.**, Parks, G. T., Goncalves, L. V. N., & De Neufville, R. (2012). *Minimizing the economic cost and risk to Accelerator-Driven Subcritical Reactor technology. Part 2: The case of designing for flexibility*. Nuclear Engineering and Design, **243**, (2012). pp. 120-134. doi:10.1016/j.nucengdes.2011.11.026 RPR

William J. Nuttall and Peter Storey, *Technology Policy Issues Relating to Future Developments in Research Reactors*, EPRG WP1129 RWP

William J. Nuttall, *EU Member States and Nuclear Power*, EU Energy Policy Blog. (<http://www.energypolicyblog.com/2011/08/02/eu-member-states-and-nuclear-power/>), available 2 August 2010 CA

Steven J Steer, **William J Nuttall**, Geoffrey T Parks and Leonardo V N Gonçalves: *Predicting the Contractual Cost of Unplanned Shutdowns of Power Stations: An Accelerator-Driven Subcritical Reactor Case Study*, Electric Power Systems Research, **81**, pp. 1662-1671 RPR

T Zhang, **W J Nuttall**, *Evaluating Government's Policies on Promoting Smart Metering Diffusion in Retail Electricity Markets via Agent Based Simulation*, Journal of Product Innovation Management, **2011:28**, pp. 169-186, RPR

William J Nuttall, Matthias Holweg and Misha Leybovich, *Too Big to Fail*, Technological Forecasting and Social Change, **78** , pp. 1286-1298 RPR

William J. Nuttall and Peter Storey, *Technology Policy Issues Relating to Future Developments in Research Reactors*, Private report for National Nuclear Centre of Excellence. CA

2010: **WJ Nuttall**, The Renaissance of Nuclear Power – Technologies and Policies for the Future of Nuclear Power, Proceedings of the FISA 2009 Conference, Prague, Euratom, pp.562-579, ISBN 978-92-79-13302-2 RCP

BA Glowacki and **WJ Nuttall**, *Hydrogen as a Fuel and as a Coolant – from the superconductivity perspective*, Journal of Energy Science, **1** (1) pp. 15-28 RPR

M van Geenhuizen, **WJ Nuttall**, DV Gibson and EM Oftedal, editors of book: *Energy and Innovation: Structural Change*, Purdue University Press (published 15 September 2010) PRB

M van Geenhuizen, **WJ Nuttall**, DV Gibson and EM Oftedal, *Energy and Environmental Innovation in Context*, chapter of book: *Energy and Innovation: Structural Change*, Purdue University Press, Chapter 1, pp. 1-16, CA chapter of PRB

WJ Nuttall, *Slaves to Oil*, chapter of book: *Energy and Innovation: Structural Change*, Purdue University Press, Chapter 6, pp. 121-134, RPR chapter of PRB

C Atoche-Kong, **WJ Nuttall**, E Cobas-Flores, and DM Reiner, *Embracing the Opportunities of a Carbon Constrained World: Strategic Options for Global Cement Companies*, chapter of book: *Energy and Innovation: Structural Change*, Purdue University Press, Chapter 15, pp. 311-342, RPR chapter of PRB

WJ Nuttall, *Future Reactors for Research – science, technology and policy*, ILL 2020 Vision Conference handbook, p. 62 September 2010 CP(Extended Abstract)

R W Grimes and **WJ Nuttall**, *Generating the Option of a Two-Stage Nuclear Renaissance*, Science, **329**, pp. 799-803 RRA

F. Lévêque, J-M Glachant, J Barquin, C von Hirschhausen, F Holz, and **WJ Nuttall** (Editors), *Security Of Energy Supply In Europe Natural Gas, Nuclear and Hydrogen*, Edward Elgar (ISBN-13 978 1 84980 032 7) PRB

WJ Nuttall, *Nuclear Energy in the Enlarged European Union*, Chapter of book: *Security Of Energy Supply In Europe Natural Gas, Nuclear and Hydrogen*, Editors: F. Lévêque, J-M Glachant, J Barquin, Pontificia, C von Hirschhausen, F Holz, and **WJ Nuttall**, Edward Elgar (ISBN-13 978 1 84980 032 7) RPR part of PRB

M-A Cardin, R De Neufville, SJ Steer, **WJ Nuttall**, GT Parks, L Gonçalves, *Analyzing Deployment Cost of a Commercial Accelerator Driven Subcritical Reactor Site Demonstrator using Real Options Analysis*, EPRG working paper 1018, RWP

DM Reiner and **WJ Nuttall** *Geological Disposal of Carbon Dioxide and Radioactive Waste: Similarities and Differences*, chapter of: Ferenc L. Toth (Editor) *Geological Disposal of Carbon Dioxide and Radioactive Waste: A Comparative Assessment*, Springer (ISBN-13: 978-9048187119) RPR part of PRB

SJ Steer, M-A Cardin, WJ Nuttall, GT Parks, LVN Goncalves, *Hedging Against Technology Risks of the Accelerator System of a First of a Kind Accelerator Driven Subcritical Reactor*, EPRG Working Paper 1013 RWP

Zhiming Cai, Richard Clarke, Bartek A Glowacki, **William J Nuttall** and Nicholas Ward, *Ongoing Ascent to the Helium Production Plateau – Insights from System Dynamics*, Resources Policy, **35** (2010) pp. 77-89 RPR

WJ Nuttall, BA Glowacki and L Bromberg, *Fusion Island – Latest Considerations Concerning Magnetic Fusion, Hydrogen Cryomagnetism and Thermochemical Hydrogen Production*, Novel Applications of Surfaces and Materials (NASM3), Institute of Physics, Programme and Abstract Book, pp 22-23. CP

2009: R Cywinski (Editor), **WJ Nuttall (contributor)**, *Towards an Alternative Nuclear Future*, Thorium Energy Amplifier Association Report, October 2009, released publicly in printed form June 2010 CA.

Laurent Pouret, Nigel Buttery and **William Nuttall**, *Is Nuclear Power Inflexible?*, Nuclear Future, **5**, (6) pp. 333-341 and pp. 343-344. RPR

Steven J Steer, **William J Nuttall**, Geoffrey T Parks and Leonardo VN Gonçalves, *Predicting the Cost of Unplanned Shutdowns of Power Stations: An Accelerator-Driven Subcritical Reactor Case Study*, EPRG Working Paper 0927, RWP

WJ Nuttall, *Nuclear Families – stories of isotopes, bombs and reactors*, books review for Nature, **462**, (7270) 12 November 2009, p. 164, books: *Uranium Wars* by Amir Aczel and *Atomic Awakening* by James Mahaffey BR

William Nuttall, *Euratom Reform has part to Play in EU's Energy Policy Plans?*, Research Europe ('View From The Top' opinion piece), 1 October 2009, also published on EU Energy Policy Blog. (<http://www.energypolicyblog.com>), 20 November 2009 CA.

D J Hamilton, F Roques and **W J Nuttall**, *A Spatial Agent Based Simulation of Technology Adoption in the Electricity Sector*, EPRG Working Paper 0923, RWP

WJ Nuttall, T Zhang, D Hamilton and F Roques, *Sociophysics Simulations of Technology Adoption and Consumer Behavior*, MIT Engineering System Division Symposium Proceedings <http://esd.mit.edu/symp09/submitted-papers/nuttall-paper.pdf> CP

WJ Nuttall, *Slaves to Oil*, EPRG Working Paper 0921, RWP

WJ Nuttall and S Taylor, *Financing the Nuclear Renaissance*, European Review of Energy Markets, **3** (2) pp. 187-202. RPR

WJ Nuttall, *Three Mile Island – Thirty Years On*, EU Energy Policy Blog, (<http://www.energypolicyblog.com>), 4 August 2009 CA

DM Reiner and WJ Nuttall *Geological Disposal of Carbon Dioxide and Radioactive Waste: Similarities and Differences* EPRG Working Paper 0918 RWP

W J Nuttall, *Nuclear Technologies*, Chapter 18 of *A Companion to Philosophy of Technology* (Technology & Science Section), Blackwell Publishing, CA part of PRB

Kong Chyong Chi, **William J Nuttall**, and David M Reiner, *Dynamics of the UK Natural Gas Industry: System Dynamics Modeling and Long-Term Energy Policy Analysis*, Technological Forecasting and Social Change, **76**, pp. 339-357 RPR

Kong Chyong Chi, **William J Nuttall**, and David M Reiner, *Dynamics of the UK Natural Gas Industry: System Dynamics Modeling and Long-Term Energy Policy Analysis*, EPRG Working Paper 0913 RWP

WJ Nuttall, *Nuclear Energy in the Enlarged European Union*, CESSA WP 19 and EPRG Working Paper 0904 RWP

2008: F Roques and **WJ Nuttall**, *Certain Aspects of the Sustainability of Nuclear Power*, CESSA Working Paper 20, and Chinese Executive Leadership Programme 2009 (translated into Mandarin Chinese) WP

WJ Nuttall and S Taylor, *Financing the Nuclear Renaissance*, CESSA Working Paper 18, and EPRG WP 0814, RWP

T Jamasb, **W J Nuttall** and M Pollitt, *The Case for a New Energy Research, Development and Promotion Policy for the UK*, Energy Policy, **36**, pp. 4610-4614 RPR

Fabien A. Roques, David M. Newbery, **William J. Nuttall**, *Portfolio Optimization and Utilities' Investments in Liberalized Power Markets*, chapter of *Analytical Methods for Energy Diversity and Security*, published by Elsevier 9 October 2008. Chapter of PRB.

WJ Nuttall, *Fusion as an Energy Source: Challenges and Opportunities*, Policy Brief, Institute of Physics, (http://www.iop.org/activity/policy/Publications/file_31695.pdf) September 2008 CA

WJ Nuttall, *When Were the First Signs of the Nuclear Renaissance? – CESSA Policy Brief*, EU Energy Policy Blog, (<http://www.energypolicyblog.com>), 28 September 2008 CA

WJ Nuttall and DM Newbery, *European Supply Security and Nuclear Power – CESSA Policy Brief*, EU Energy Policy Blog, (<http://www.energypolicyblog.com>), 5 September 2008 CA

Tao Zhang and **William J. Nuttall**, *Evaluating Government's Policies on Promoting Smart Metering in Retail Electricity Markets via Agent Based Simulation*, EPRG Working Paper 08/22 RWP

WJ Nuttall and Devon Manz, *A New Energy Security Scenario For The Twenty-First Century*, Technological Forecasting and Social Change, **75**, pp.1247-1259 RPR

V Maugis and **W J Nuttall**, *Governance and Regulation of Electricity*, EPRG Working Paper 0818 RWP

WJ Nuttall and BA Glowacki, *Viewpoint: Fusion Island*, Nuclear Engineering International, **53**, (648), July 2008, pp. 38-41 CA

T Jamasb, **W J Nuttall**, MG Pollitt and A Maratou *Technologies for a Low-Carbon Electricity System: An Assessment of the UK's Issues and Options*, chapter of *Delivering a Low Carbon Electricity System*, Cambridge University Press ISBN-13: 9780521888844 Chapter of PRB

M-A Cardin, **W J Nuttall**, R de Neufville, J Dahlgren, *Extracting Value From Uncertainty: A Methodology for Engineering Systems Design*, International Council on Systems Engineering conference San Diego June 2007, proceedings published by Curran Associates, Inc. (June 2008) ISBN: 9781605601199 CP

A Bredimas and **W J Nuttall**, *An International Comparison of Regulatory Organizations and Licensing Procedures for New Nuclear Power Plants*, Energy Policy **36**, pp. 1344-1354, RPR

B A Glowacki and **W J Nuttall**, *Assessment of liquid hydrogen cooled MgB₂ conductors for magnetically confined fusion*, 8th European Conference on Applied Superconductivity (EUCAS 2007), Journal of Physics: Conference Series **97** 012333 [doi:10.1088/1742-6596/97/1/012333](https://doi.org/10.1088/1742-6596/97/1/012333) CP

Fabien A Roques, David M Newbery and **William J Nuttall**, *Fuel Mix Diversification Incentives in Liberalized Electricity Markets: A Mean-Variance Portfolio Theory Approach*, Energy Economics, **30**, pp. 1831-1849, RPR

2007: **W.J. Nuttall** and Devon Manz, *A New Energy Security Scenario For The Twenty-First Century*, CESSA WP 6 and EPRG Working Paper 07/31 RWP

William J Nuttall, Ian Farnan, R.J.M Konings and David J Hamilton (Guest Editors), *Long Term Management Options for Separated Civil Plutonium*, Special Issue of Progress in Nuclear Energy **49** (8) November 2007 JSI

William J Nuttall, Ian Farnan, R.J.M Konings and David J Hamilton, *The Management of Separated Plutonium – An Introduction*, Paper in: *Long term management Options for Separated Plutonium*, Special Issue of Progress in Nuclear Energy **49**, (8), pp. 568-573 RPR

William J Nuttall, Ian Farnan, R.J.M Konings and David J Hamilton, *The Management of Separated Plutonium – An Introduction*, CESSA Working Paper 2 WP

Tao Zhang and **W J Nuttall**, *Agent Based Simulation of Smart Metering Technology Adoption*, EPRG Working Paper 07/27 RWP

A Bredimas and **W J Nuttall**, *Les Systèmes Réglementaires pour les Nouveaux Projets de Centrales Nucléaires dans Sept Pays: une Analyse Comparée*, Revue Générale Nucléaire, Volume 2007, No. 5, Septembre-Octobre, pp. 68-76, RPR

T Falqueto, **W J Nuttall** and Dariusz M. Trzmielak, *An assessment of logistics system opportunities for Lodz – lessons learned from the Zaragoza experience*, chapter of Marketing Technologiczny I Marketing Terytorialny. Editors: T. Markowskiego, D. Trzmielaka, J. Sosonowskiego, Polish Academy of Science, Biuletyn, Zeszyt 235, Warsaw (2007) chapter of PRB

W J Nuttall, *European Supply Security and Nuclear Power* EU Energy Policy Blog, (<http://www.energypolicyblog.com>), 1 November 2007 CA

W J Nuttall, *Why is nuclear power baseload?* EU Energy Policy Blog, (<http://www.energypolicyblog.com>), 1 July 2007 CA

R H Clarke, N Ward, Z Cai, BA Glowacki and **W J Nuttall**, *A Three Party Global Helium Resource Study*, CryoPrague 2006 Volume 2, proceedings of ICMC '06 and 9th Cryogenics multiconference, Editors D Evans, M Lansky and V Chrz, Publisher: Icaris Ltd. Prague pp. 215-218 CP

Z Cai, R H Clarke, **W J Nuttall**, N Ward and BA Glowacki, *Is Helium From Air A Future Source For Helium Production?*, CryoPrague 2006 Volume 2, proceedings of ICMC '06 and 9th Cryogenics multiconference, Editors D Evans, M lansky and V Chrz, Publisher: Icaris Ltd. Prague pp. 219-222 CP

W J Nuttall, *Nuclear Renaissance Requires Nuclear Enlightenment*, Chapter 16 of *Nuclear or Not?* Editor D. Elliot, Palgrave, ISBN 978-0-230-50764-7 (2007) chapter of PRB

T Jamasb, **W J Nuttall** and M Pollitt, *The Case for a New Energy Research, Development and Promotion Policy for the UK* Paper prepared for: State of Science Review on Public Policy in the Energy Context, Office of Science and Innovation, Foresight and Horizon Scanning Centre, HM Government CA.

A Bredimas and **W J Nuttall**, A Comparison of International Regulatory Organizations and Licensing Procedures for New Nuclear Power Plants, CESSA WP 1 and EPRG Working Paper 07/09 RWP

L Pouret and **W J Nuttall**, *Can Nuclear power Be Flexible?*, CESSA WP3 and EPRG Working Paper 07/10 RWP

2006: F A Roques, D M Newbery, and **W J Nuttall**, *Fuel Mix Diversification Incentives in Liberalised Electricity markets: a Mean-Variance Portfolio Theory Approach*, European University Institute Working Paper: RSCAS2006/33, RWP

F A Roques, D M Newbery, and **W J Nuttall**, *Fuel Mix Diversification Incentives in Liberalised Electricity markets: a Mean-Variance Portfolio Theory Approach*, EPRG, 06/26 RWP

W J Nuttall, M Joyce, C Squire and R Kemp, *Nuclear New Build: getting it done, while keeping it safe*, Parliamentary Brief **10** (10) pp. 26-28 , CA

T Jamasb, **W J Nuttall** and M Pollitt (Editors), *Future Electricity Technologies and Systems*, Cambridge University Press, ISBN: 0-52186049-0 (Summer 2006) PRB

T Jamasb, **W J Nuttall** and M Pollitt, *New Electricity Technologies for a Sustainable Future*, chapter of: *Future Electricity Technologies and Systems*, Cambridge University Press, ISBN: 0-52186049-0 (Summer 2006) part of PRB

Roques, Fabien A., Nuttall, William J. and Newbery, David M. *Using probabilistic analysis to value power generation investments under uncertainty*, EPRG, working paper 06/19 RWP

W J Nuttall, *Nuclear Renaissance Requires Nuclear Enlightenment*, EPRG working paper 06/12 RWP

F A Roques, D M Newbery, **W J Nuttall**, R de Neufville and S Connors, *Nuclear Power: a Hedge against Uncertain Gas and Carbon Prices*, Energy Journal, **27**, (4) pp. 1-24 RPR

2005: **W J Nuttall**, B A Glowacki and R Clarke, *A Trip to "Fusion Island"*, The Engineer, 31 October 2005 pp. 16-18 CA.

B A Glowacki, A P Finlayson, **W J Nuttall** and T Janowski, *Hydrogen as a Fuel and as a Coolant – from the Superconductivity Perspective*, (submitted to the Proceedings of the ELMECO 2005 conference) CP

F A Roques, D M Newbery, **W J Nuttall** and R de Neufville, *Marchés électriques, Sécurité Energétique et Diversification Technologique – Le Nucléaire comme Couverture, Face aux Risques de Prix du Gaz et du Carbone?* Revue de L'Energie, (568) Nov-Dec 2005, pp. 373-385 RPR

F A Roques, D M Newbery, **W J Nuttall**, S Connors and R de Neufville, *Valuing Portfolio Diversification for a Utility: Application to a Nuclear Power Investment when Fuel, Electricity and Carbon Prices are Uncertain*, Nuclear Industry Climate Advisory Board CA.

T Jamasb, **W J Nuttall** and M Pollitt, *New Electricity Technologies for a Sustainable Future*, chapter of: *Future Electricity Technologies and Systems*, EPRG Working Paper Number 05/12 RWP

F A Roques, D M Newbery, **W J Nuttall** and R de Neufville, *Nuclear Power: a Hedge against Uncertain Gas and Carbon Prices*, EPRG Working Paper Number 05/09 RWP

A D F Herring, **W J Nuttall**, M F Thomas, J P Goff, A Stunault, R C C Ward, M R Wells and W G Stirling, *Thickness Effects on the Magnetism of Ho Thin Films*, Journal of Physics: Condensed Matter, **17**, 2005, pp. 2543-2552 RPR

W J Nuttall, *The Nuclear Renaissance technologies and policies for the future of nuclear power*, IOP/CRC Press, Taylor and Francis, ISBN 0-75030936-9, 322 pages (2005) PRB

- W.J. Nuttall**, D.G. Ireland, J.S. Al-Khalili and W. Gelletly, *Potential for British Research into the Transmutation of Radioactive Wastes and Problematic Nuclear Materials*, Intl. J. Critical Infrastructures, volume **1**, issue 4, 2005 pp. 380-393 RPR
- F Roques, D M Newbery and **W J Nuttall**, *Investment Incentives and Electricity Market Design: the British Experience*, Review of Network Economics, **4**, Issue 2, June 2005, pp. 93-128 RPR
- 2004: F Roques, D M Newbery and **W J Nuttall**, *Generation Adequacy and Investment Incentives in R Britain from the Pool to NETA*, CMI Electricity Project Working Paper Number 58 (2004) RWP
- N. Bernhoeft, G.H. Lander, M.J. Longfield, S. Langridge, D. Mannix, S. Brown, **W.J.Nuttall**, A.Hiess, C. Vettier and P. Lejay, *Anomalous displacement of magnetic Bragg peaks in the presence of short range order*, Journal of Physics: Condensed Matter, volume 16, issue 23, pages 3869 – 3878 RPR.
- W J Nuttall**, *You don't have to be a bright spark to get energy efficient*, The Engineer, 9 February 2004, p. 20 CA.
- W J Nuttall**, *Pulling the plug on Regenesys plunges energy policy back into the dark ages*, The Engineer, 2 April 2004, pp. 18-19 CA.
- W J Nuttall**, *Fusion should put its energy into oil*, The Engineer, 28 May 2004, p. 18 CA.
- W J Nuttall**, *Twelfth night warning, if the lights go out we need someone to distinguish a crisis from a problem*, The Engineer, 25 July 2004, p. 19 CA.
- W J Nuttall**, *The sunny side of solar power*, The Engineer, 24 September 2004, p. 23 CA.
- 2003: **W J Nuttall**, *Why Nuclear Transmutation Research Matters to the UK*, Report of a one-day workshop. Edited by Sally Croft (EPSRC May 2003) CA.
- C M Aegerter, H Keller, S L Lee, C Ager, F Y Ogrin, R Cubitt, E M Forgan, **W J Nuttall**, P G Kealey, S H Lloyd, S T Johnson, T M Riseman and M P Nutley, *Transition from Tupe-I to Type-II Superconducting Behaviour with Temperature observed by μ SR and SANS*, arXiv:cond-mat/0305595, 26 May 2003 WP.
- W J Nuttall**, *Nuclear Waste Management*, Science and Public Affairs, pp 18-19, June 2003 CA.
- W J Nuttall**, *Pay more for power or the UK's lights will go out*, The Engineer, 26 September 2003, p. 19 CA.
- W J Nuttall**, *The winds of change are offering serious opportunities for engineers*, The Engineer, 26 November 2003, p. 19 CA.
- 2002: **W.J. Nuttall**, *Where are the Brunels of the Twenty-First Century?*, Research Fortnight ('View From The Top' opinion piece), **9.04**, 180, 13 November 2002, CA.
- W.J. Nuttall** and Tajinder Panesor, *The Role for Physics in Energy Supply*, Physics World, **15**, (7) p. 51 (July 2002), CA.
- W.J. Nuttall**, S.C. Perry, W.G. Stirling, P.W. Mitchell, S.H. Kilcoyne, and R. Cywinski, *Antiferromagnetic Critical Phenomena in USb*, Physica B, **315**, (2002) 179-186 RPR.
- 2001: **W.J. Nuttall**, *Physics Higher Education Models*, an appendix to the Institute of Physics report *Physics Building a Flourishing Future* (Inquiry into Undergraduate Physics, October 2001), CA
- 2000: **W.J. Nuttall**, *A Fresh Look at Nuclear Waste*, Science and Public Affairs, August 2000, 15-17. CA
- W.J. Nuttall**, *Science, Pure Politics?*, Review of *The Politics of Pure Science (1999 Edition)* by Daniel S. Greenberg, Science and Public Policy, **27** (4) 304-306 August 2000. BR

- 1999: **W.J. Nuttall**, *Engineering and Physical Sciences Research Council(UK) Peer Review Procedures 1995-1996*, Research Evaluation **8** (1999) 132-140. RPR
- D.Mannix, S. Langridge, G.H. Lander, J. Rebizant, M.J. Longfield, W.G. Stirling, **W.J. Nuttall**, S. Coburn, S. Wasserman, L. Soderholm, *Experiments on Transuranium Compounds With X-Ray Resonant Exchange Scattering*, Physica B **262** (1999) 125-140 RPR
- 1998: **W.J. Nuttall**, *What is a Physical Sciences PhD For? Review of Rethinking Science as a Career* by S. Tobias, D.E. Chubin and K. Aylesworth, Science and Public Policy **25** (1998) 419-420. BR
- C.M. Aegerter, S.T. Johnson, **W.J. Nuttall**, S.H. Lloyd, M.T. Wylie, M.P. Nutley, E.M. Forgan, R. Cubitt, S.L. Lee, D.M. Paul, M. Yethiraj and H.A. Mook, *Observation of Vortex Lattice Melting in Twinned $YBa_2Cu_3O_{7-x}$* , Using Neutron Small Angle Scattering, Phys. Rev. B. **57** (1998) 14511-14517 RPR
- D. Watson, **W.J. Nuttall**, E.M. Forgan, D. Fort, *Refinement of Magnetic Structures with X-rays: Nd as a Test Case*, Phys. Rev. B **57** (1998) R8095-R8098 RPR
- W.J. Nuttall** (as 'Bill Nuttall'), *Whitehall, Westminster and Swindon*, Physics World, **11** (4) 53 (April 1998) CA.
- 1997: **W.J. Nuttall**, *Microstructure and Phase Behaviour of Classical Condensates in Porous Media*, Daresbury Laboratory Annual Report Scientific Highlights 1997. CA
- W.J. Nuttall**, S.C. Perry, D.R. Bowyer, W.G. Stirling, G.H. Lander and O.Vogt, *Magneto-Elastic Effects in $USb_{0.8}Te_{0.2}$* . Physica B. **240** (1997) 353. RPR
- D.W. Brown, P.E. Sokol, A. Clarke, M.A. Alam and **W.J. Nuttall**, *Structure of CO_2 in Vycor*, J. Phys. Condens. Matter **9** (1997) 7317 RPR
- S. Langridge, G.H. Lander, N. Bernhoeft, A. Stenault, F. de Bergevin, C. Vettier, G. Grübel, C. Sutter, **W.J. Nuttall**, W.G. Stirling, K. Mattenberger and O. Vogt, *Separation of the Spin and Orbital Moments in Antiferromagnetic UAs*, Phys. Rev. B. **55** (1997) 6392 RPR
- 1996: S.C. Perry, **W.J. Nuttall**, W.G. Stirling, G.H. Lander and O.Vogt, *X-ray Scattering Study of the Two Magnetic Correlation Lengths in Uranium Antimonide*, Phys. Rev. B. **54** (1996) 15234- 15237 RPR
- D. Watson, E.M. Forgan, **W.J. Nuttall**, P.E. Sokol, S.J. Shaikh, S.W. Zochowski and D. Fort, *Magnetism in Neodymium at High Pressure*, J. Phys. Condens. Matter. **8** (1996) 5049-5057. RPR
- M.M.R. Costa, M.J.M. de Almeida, **W.J. Nuttall**, W.G. Stirling, C.C. Tang, J.B. Forsyth and M.J. Cooper, *A Magnetic X-Ray Diffraction Investigation of Gadolinium Selenide*, J. Phys.: Condens. Matter, **8** (1996) 2425-2435. RPR
- D. Watson, E.M. Forgan, **W.J. Nuttall**, W.G. Stirling, and D. Fort, *High Resolution Magnetic X-Ray Diffraction from Neodymium*, Phys. Rev. B. **53** (1996) 726-730 RPR
- 1995: **W.J. Nuttall**, S. Langridge, W.G. Stirling, G.H. Lander, B. Lebech, O.Vogt, *Resonant X-Ray and Neutron Diffraction Study of $USb_{0.8}Te_{0.2}$* . Phys. Rev. B. **52** (1995) 4409-4419 RPR
- W.J. Nuttall**, D.Y. Noh, B.O. Wells, and R.J. Birgeneau, *Isothermal Melting of Near-Monolayer Xenon on Single Crystal Graphite*, J. Phys.: Condens. Matter. **7** (1995) 4337-4350. RPR
- S. Langridge, W.G. Stirling, **W.J. Nuttall**, G.H. Lander, B. Lebech and O.Vogt, *Neutron Scattering Study of the Magnetic Phases of $USb_{0.8}Te_{0.2}$* , Physica B **213 & 214**, 122-124 (1995). RPR
- D. Watson, E.M. Forgan, W.G. Stirling, **W.J. Nuttall**, S.C. Perry, M.M.R. Costa and D. Fort, *Magnetic X-Ray Diffraction From Samarium*. J. Magn. Magn. Mater. **140-144**, 743-744, (1995) RPR

- 1994: **W.J. Nuttall**, D.Y. Noh, B.O. Wells, and R.J. Birgeneau, *Synchrotron X-Ray scattering Study of the Pressure Melting of Near-Monolayer Xenon on Single Crystal Graphite at 140K*. *Surface Science* **307-309**, 768-774 (1994) RPR
- 1993: **W.J. Nuttall**, K.P. Fahey, M.J. Young, B. Keimer, R.J. Birgeneau and H.Suematsu, A *Synchrotron X-Ray Diffraction Study of the Structural Phase Behaviour of Multilayer Xenon on Single Crystal Graphite*. *J. Phys.: Condens. Matter* **5** (1993) 8159-8176 RPR
- 1991: D.Y. Noh, J.D. Brock, J.O. Fossum, J.P. Hill, **W.J. Nuttall**, J.D. Litster and R.J. Birgeneau, *Synchrotron X-Ray Study of Dimensional Cross-Over in Solid-Phase Smectic Liquid Crystal Films*. *Phys. Rev. B* **43** (1) 842-850 (1991) RPR

In addition there are numerous scientific items of an informal nature available in published form in the period 1987-1998. These additional short papers and abstracts include entries in the annual reports of scientific central facilities and short entries in conference handbooks.