

(Last updated: 25 Nov 2018)

**PEER-REVIEWED JOURNAL PAPERS**

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- Y. Zhou, **M. Panteli**, R. Moreno and P. Mancarella, "System-Level Assessment of Reliability and Resilience Provision from Microgrids", *Applied Energy*, Vol. 230, November 2018
- D. Trakas, **M. Panteli**, P. Mancarella, and N. Hatziaargyriou, "Spatial Risk Analysis of Power Systems Resilience During Extreme Events", *Risk Analysis*, Accepted, September 2018
- P. Fernandez-Porras, **M. Panteli** and J. Quiros-Tortos, "Intentional Controlled Islanding: When to Island for Power System Blackout Prevention", *IET Generation Transmission and Distribution*, Accepted, May 2018
- J. Quirós-Tortós, P. Demetriou, **M. Panteli**, E. Kyriakides and V. Terzija, "Intentional Controlled Islanding and Risk Assessment: A Unified Framework", *IEEE Systems Journal*, Early Access, November 2017.
- **M. Panteli**, P. Mancarella, D. N. Trakas, E. Kyriakides, and N. D. Hatziaargyriou, "Metrics and Quantification of Operational and Infrastructure Resilience in Power Systems", *IEEE Transactions on Power Systems*, vol. 32, no. 6, November 2017
- **M. Panteli**, P. Mancarella, C. Pickering, S. Wilkinson, and R. Dawson, "Power System Resilience to Extreme Weather: Fragility Modelling, Probabilistic Impact Assessment, and Adaptation Measures", *IEEE Transactions on Power Systems*, vol. 32, no. 5, September 2017
- **M. Panteli**, D. N. Trakas, P. Mancarella, and N. D. Hatziaargyriou, "Power Systems Resilience Assessment: Hardening and Smart Operational Enhancement Strategies", *Proceedings of the IEEE*, vol. 105, no. 7, pp. 1202-1213, July 2017
- G. Fu, S. Wilkinson, R.J. Dawson, H.J. Fowler, C. Kilsby, **M. Panteli** and P. Mancarella, "An Integrated Approach to Assess the Resilience of Future Electricity Infrastructure Networks to Climate Hazards", *IEEE Systems Journal*, Early Access, May 2017
- S. Espinoza, **M. Panteli**, P. Mancarella, and H. Rudnick, "Multi-phase assessment and adaptation of power systems resilience to natural hazards", *Electric Power Systems Research*, vol. 136, pp. 352-361, July 2016.
- **M. Panteli**, D.N. Trakas, P. Mancarella, and N.D. Hatziaargyriou, "Boosting the Power Grid Resilience to Extreme Weather Events Using Defensive Islanding", *IEEE Transactions on Smart Grid*, Special issue on "Power Grid Resilience", vol. 7, no. 6, pp. 2913-2922, March 2016
- IEEE Working Group on Understanding, Prediction, Mitigation and Restoration of Cascading Failures, "Benchmarking and Validation of Cascading Failure Analysis Tools", Key contributors (in alphabetical order): J. Bialek, E. Ciapessoni, D. Cirio, E. Cotilla-Sanchez, C. Dent, I. Dobson, P. Henneaux, P. Hines, J. Jardim, S. Miller, **M. Panteli**, M. Papic, A. Pitto, J. Quiros-Tortos, and D. Wu, *IEEE Transactions on Power Systems*, vol. 31, no. 6, pp. 4887-4900, February 2016
- **M. Panteli** and P. Mancarella, "Influence of Extreme Weather and Climate Change on the Resilience of Power Systems: Impacts and Possible Mitigation Strategies", *Electric Power Systems Research*, vol. 127, pp. 259-270, October 2015
- J. Quirós-Tortós, **M. Panteli**, P. Wall and V. Terzija, "Sectionalizing Methodology for Parallel System Restoration Based on Graph Theory," *IET Generation, Transmission & Distribution*, vol. 9, no. 1, pp. 1216-1225, August 2015
- **M. Panteli** and P. Mancarella, "The Grid: Stronger, Bigger, Smarter? Presenting a Conceptual Framework of Power System Resilience", *IEEE Power and Energy Magazine*, vol. 13, no. 3, pp. 58-66, 2015 May/June issue
- **M. Panteli**, P. A. Crossley and J. Fitch, "Design of Dependable and Secure System Integrity Protection Schemes", *International Journal of Electrical Power and Energy Systems*, vol. 68, pp. 15-25, June 2015
- **M. Panteli** and D. S. Kirschen, "Situation Awareness in Power Systems: Theory, Concepts and Applications", *Electric Power Systems Research*, vol. 122, pp. 140-151, May 2015
- **M. Panteli** and P. Mancarella, "Modelling and Evaluating the Resilience of Critical Electrical Power Infrastructure to Extreme Weather Events", Early access article, *IEEE Systems Journal*, February 2015

- **M. Panteli**, P. A. Crossley and J. Fitch, "Quantifying the Reliability Level of System Integrity Protection Schemes", *IET Generation, Transmission & Distribution*, vol. 8, no. 4, pp. 753 – 764, April 2014
- **M. Panteli**, P. A. Crossley, D. S. Kirschen and D. J. Sobajic, "Assessing the Impact of Insufficient Situation Awareness on Power System Operation", *IEEE Transactions on Power Systems*, vol. 28, no. 3, pp. 2967-2977, August 2013

## PEER-REVIEWED INTERNATIONAL CONFERENCE PAPERS

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- M.A Van Harte, **M. Panteli**, L. Pittorino & R Koch, "Utilizing Advanced Resiliency Planning Within the Electrical Sector", Accepted, 2018 CIGRE Paris Session
- W. Zhu, **M. Panteli**, and J. V. Milanovic, "Reliability and Vulnerability Assessment of Interconnected ICT and Power Networks Using Complex Network Theory", Accepted, 2018 IEEE PES General Meeting
- H. Liu, Y. Zhou, and **M. Panteli**, "Visualization of Network Vulnerability During Extreme Weather Events for Situation Awareness Enhancement", Accepted, 2018 IEEE PES General Meeting
- M. Van Harte, **M. Panteli**, R. Koch, S. Mahomed, and A. Jordaan, "Resiliency of Critical Infrastructure: Power System Resilience Capabilities and Assessment Framework", 2017 Disaster Risk Reduction Conference, South Africa, 27-28 September 2017
- S. Espinoza, R. Sacaan, H. Rudnick, **M. Panteli**, P. Mancarella, A. Poulos, J. Llera, A. Navarro, and R. Moreno, "Seismic Resilience Assessment and Adaptation of the Northern Chilean Power System", 2017 IEEE PES General Meeting, Chicago, USA, 16-20 July 2017
- A.I. Nikolaidis, C.A. Charalambous and **M. Panteli**, "Distribution Loss Factors for the Emerging, Open-Access Electricity Market in Cyprus", 2017 IEEE PES PowerTech, Manchester, UK, 18-22 June 2017
- B. Wang, Y. Zhou, **M. Panteli**, and P. Mancarella, "Assessing the Impacts of Extreme Temperatures and Water Availability on the Resilience of the GB Power System", 2016 IEEE International Conference on Power System Technology (POWERCON), Wollongong, Australia, Sept 28 – Oct 1 2016
- D.N. Trakas, **M. Panteli**, P. Mancarella, and N.D. Hatziairgyriou, "A Severity Risk Index for High-impact Low-probability Weather Events in Transmission Systems", 2016 IEEE Innovative Smart Grid Technologies - Europe (ISGT Europe), Ljubljana, Slovenia, 9-12 Oct 2016
- **M. Panteli**, A.I. Nikolaidis, Y. Zhou, F.R. Wood, S. Glynn, C.A. Charalambous, and P. Mancarella, "Analyzing the Resilience and Flexibility of Power Systems to Future Demand and Supply Scenarios", Accepted, IEEE Mediterranean Electrotechnical Conference (MELECON), Limassol, Cyprus, 18-20 April, 2016
- **M. Panteli**, P. Mancarella, X. Hu, I. Cotton, D. Calverley, R. Wood, C. Pickering, S. Wilkinson and R. Dawson, "Impact of Climate Change on the Resilience of UK Power System", Project Collaborative paper, IET International Conference on Resilience of Transmission and Distribution Networks (RTDN) 2015, Birmingham, UK, 22-24 September, 2015
- Nan Liu, **M. Panteli** and P.A. Crossley, "Reliability Evaluation of IEC 61850 based Substation Communication Network in System Integrity Protection Scheme", IET International Conference on Resilience of Transmission and Distribution Networks (RTDN) 2015, Birmingham, UK, 22-24 September, 2015
- P. Fernández-Porras, **M. Panteli** and J. Quirós-Tortós, "A Risk-Based Methodology for Defining the Time of Intentional Controlled Islanding", 2015 IEEE PES Conference on Innovative Smart Grid Technologies, Latin America (2015 ISGT LA), Montevideo, Uruguay, 5-7 October 2015
- **M. Panteli**, P. Mancarella, S. Wilkinson, R. Dawson and C. Pickering, "Assessment of the Resilience of Transmission Networks to Extreme Wind Events", IEEE PowerTech 2015, Eindhoven, Netherlands, 29 June – 2 July 2015
- **M. Panteli** and P. Mancarella, "Operational Resilience Assessment of Power Systems Under Extreme Weather and Loading Conditions", IEEE PES General Meeting 2015, Denver, USA, 26-30 July, 2015
- N. Liu, **M. Panteli** and P. A. Crossley, "Reliability Evaluation of an All-digital System Integrity Protection Scheme", Protection, Automation and Control World (PACW) Conference, Glasgow, UK, 29 June – 2 July, 2015

- **M. Panteli**, P. A. Crossley, and J. Fitch, "Determining the Reliability Requirements of System Integrity Protection Schemes", in *Proceedings of 13th International Conference on Probabilistic Methods Applied to Power Systems (PMAPS)*, Durham, UK, 7-10 July 2014
- N. Liu, **M. Panteli**, and P. A. Crossley, "Reliability evaluation of substation automation system (SAS) communication network based on IEC 61850", in *Proceedings of the 12th IET International Conference on Developments in Power System Protection (DPSP)*, Copenhagen, Denmark, 31 March - 3 April 2014.
- J. Quirós-Tortós, **M. Panteli**, V. Terzija, and P. A. Crossley, "On Evaluating the Performance of Intentional Controlled Islanding Schemes", in *Proceedings of the 2013 IEEE General Meeting*, pp.1-5, Vancouver, Canada, 21-25 July 2013
- **M. Panteli**, P. A. Crossley and D. S. Kirschen, "Reliability Analysis of Defense Plans Against Slow and Fast Cascading Phenomena", in *Proceedings of the 2013 IEEE PowerTech*, pp. 1-6, Grenoble, France, 16-20 June, 2013
- **M. Panteli**, D. S. Kirschen, P. A. Crossley and D. J. Sobajic, "Enhancing Situation Awareness in Power System Control Centers", in *Proceedings of the 2013 IEEE International Multi-Disciplinary Conference on Cognitive Methods in Situation Awareness and Decision Support (CogSIMA)*, pp. 1-8, San Diego, USA, 25-28 February, 2013
- **M. Panteli**, and P. A. Crossley, "Assessing the Risk Associated with a High Penetration of System Integrity Protection Schemes", in *Proceedings of the 2012 3<sup>rd</sup> IEEE PES International Conference and Exhibition on Innovative Smart Grid Technologies (ISGT Europe)*, pp. 1-7, Berlin, Germany, 14-17 October, 2012
- **M. Panteli**, and P. A. Crossley, "Reliability assessment of SIPS Based on a Safety Integrity Level and Spurious Trip Level", in *Proceedings of the International Conference on Sustainable Power Generation and Supply (SUPERGEN 2012)*, pp. 1-7, Hangzhou, China, 8-9 September, 2012
- **M. Panteli**, P. A. Crossley, and D. S. Kirschen, "A Multi-state Model for Assessing the Impact of Insufficient Wide-area Situational Awareness," in *Proceedings of the 11th IET International Conference on Developments in Power Systems Protection (DPSP)*, pp.1-6, Birmingham, UK, 23-26 April, 2012
- **M. Panteli**, and P. A. Crossley, "Impact of SIPS Performance on Power Systems Integrity," in *Proceedings of the International Conference on Advanced Power System Automation and Protection (APAP)*, pp.280-285, Beijing, China, 16-20 October, 2011
- **M. Panteli**, and D. S. Kirschen, "Assessing the Effect of Failures in the Information and Communication Infrastructure on Power System Reliability," in *Proceedings of the 2011 IEEE Power Systems Conference and Exposition (PSCE)*, pp.1-7, Phoenix, USA, 20-23 March, 2011

## PRESENTATIONS/SEMINARS

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- **M. Panteli**, "Resilience of Power Systems to Black Sky Hazards: Methods, Metrics and Thoughts", invited panel presentation in 2018 INFORMS Annual Meeting, Phoenix, USA, November 2018
- **M. Panteli**, "Operational and Infrastructure Multi-Phase Resilience and Risk Assessment of Power Systems: Methods, Metrics and Thoughts", invited seminar in Joint Research Centre, European Commission, September 2018
- **M. Panteli**, "Overview of CIGRE WG4.47 Power System Resilience", invited talk in IEEE Cascading Failure Working Group Meeting, 2018 IEEE PES General Meeting, August 2018, Portland, USA
- **M. Panteli**, "Risk and Resilience of Power Systems: The UK case study", invited webinar in CIGRE WG C4.47 "Power System Resilience", 15<sup>th</sup> March 2018
- **M. Panteli**, "Power Systems Resilience to High-Impact, Low-Probability Events: How ready are we?", invited talk in 2<sup>nd</sup> International Workshop on Modelling of Physical, Economic and Social Systems for Resilience Assessment, Joint Research Centre, European Commission, Ispra, Italy, 14-16 December 2017
- **M. Panteli**, "Resilience of Power Systems to Extreme Weather and Natural Disasters: Methods, Metrics and Planning", invited talk in HubNet Symposium, University of Bath, 19<sup>th</sup> September 2017
- **M. Panteli**, "Resilience Assessment and Adaptation of Power Systems to High-impact, Low-probability Events", panel session "Understanding resilience in critical infrastructures", 2017 IEEE PES ISGT (Europe), Torino, Italy, 27-29 September 2017

- **M. Panteli**, "Operational and Infrastructure Multi-phase Modelling and Metrics to Assess Power Systems Resilience to Natural Hazards", invited talk in Special Session on *Disaster Management and Resilience of Electric Power Systems*, 2017 IEEE PES PowerTech, Manchester, UK, 18-22 June 2017
- **M. Panteli**, "Power System Resilience to Extreme Weather: Fragility Modelling, Probability Impact Assessment and Adaptation Measures", invited talk in CIGRE Chile Workshop, March 2017
- N.D. Hatziaargyriou, D.N. Trakas, **M. Panteli**, and P. Mancarella, "Assessing and Boosting Power System Resiliency to Extreme Weather Events", invited talk in 2016 IEEE PES General Meeting, Super Session Panel on "Resiliency in the Power Grid"
- **M. Panteli**, "Reliability Assessment of Dinorwig Intertrip Scheme, North Wales, UK", invited talk in the course "ECE424: Fault Tolerant Systems, University of Cyprus, April 2016.
- **M. Panteli**, "Defining, Evaluating and Boosting Power Systems Resilience to High-impact Low-probability Events", invited talk, University of Cyprus, September 2015
- **M. Panteli** and P. Mancarella, "Assessing the Impact of Climate Change and Extreme Weather on the Resilience of Critical Power Infrastructure", invited talk given at National Technical University of Athens (NTUA), Greece, April 2015.
- **M. Panteli** and P. Mancarella, "Impact of Extreme Weather on the Resilience of Critical Power Infrastructure", 5<sup>th</sup> Annual Event on Risk and Reliability Modeling of Energy Systems, Durham, UK, November 2014
- P. Demetriou, J. Quiros-Tortos, **M. Panteli**, E. Kyriakides and V. Terzija, "Intentional Controlled Islanding Method based on Identification of Cutsets", presentation given by P. Demetriou, KIOS Research Center, University of Cyprus, April 2014.
- **M. Panteli**, "Analysis and Prevention of Power System Blackouts", presentation in *Seminar on Reliability Assessment of Power Systems*, The University of Manchester, UK, March 2013
- **M. Panteli**, "Assessing the Contribution of Non-electrical Failures to the Probability of Power System Blackouts", invited talk in the University of Cyprus, May 2012
- P. A. Crossley and **M. Panteli**, "Impact of Functional Integration on the Reliability of Substation Protection and Control Systems", tutorial presentation in *11th International Conference on Developments in Power Systems Protection (DPSP)*, Birmingham, UK, 23-26 April, 2012
- **M. Panteli** and D. S. Kirschen, "The Role of Human Operator and of Information and Communication Infrastructure Under Emergencies", in *11th Workshop on Electrical Power Control Centers: Experiences and Trends in Generation, Transmission and Distribution Control Centers*, Altea, Spain, May 2011
- **M. Panteli**, and D. S. Kirschen, "Impact of Information and Communication Technologies on Power System Security", poster presented in *EEE PGR Poster Conference*, Manchester, UK, November 2010