

2012 Index

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This index covers all technical items — papers, correspondence, reviews, etc. — that appeared in this periodical during 2012, and items from previous years that were commented upon or corrected in 2012. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

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Gong, Q., Midlam-Mohler, S., Marano, V., and Rizzoni, G., Study of PEV Charging on Residential Distribution Transformer Life; *TSG March 2012 404-412*
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Heydt, G. T., Chowdhury, B. H., Crow, M. L., Haughton, D., Kiefer, B. D., Meng, F., and Sathyanarayana, B. R., Pricing and Control in the Next Generation Power Distribution System; *TSG June 2012 907-914*

- Hill, C. A.**, Such, M. C., Chen, D., Gonzalez, J., and Grady, W. M., Battery Energy Storage for Enabling Integration of Distributed Solar Power Generation; *TSG June 2012 850-857*
- Hines, P. D. H.**, see Cotilla-Sanchez, E., *TSG Dec. 2012 1832-1840*
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- Huang, A.**, see Baran, M. E., *TSG June 2012 1039-1046*
- Huang, A. Q.**, see She, X., *TSG June 2012 975-985*
- Huang, D.**, Zareipour, H., Rosehart, W. D., and Amjady, N., Data Mining for Electricity Price Classification and the Application to Demand-Side Management; *TSG June 2012 808-817*
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- Hubert, T.**, and Grijalva, S., Modeling for Residential Electricity Optimization in Dynamic Pricing Environments; *TSG Dec. 2012 2224-2231*
- Hug, G.**, and Giampapa, J. A., Vulnerability Assessment of AC State Estimation With Respect to False Data Injection Cyber-Attacks; *TSG Sept. 2012 1362-1370*
- Hui, S. Y.**, Lee, C. K., and Wu, F. F., Electric Springs—A New Smart Grid Technology; *TSG Sept. 2012 1552-1561*

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- Ilic, M. D.**, see Verzijlbergh, R. A., *TSG Sept. 2012 1203-1212*
- Illindala, M.**, and Venkataramanan, G., Frequency/Sequence Selective Filters for Power Quality Improvement in a Microgrid; *TSG Dec. 2012 2039-2047*
- Ingram, D. M. E.**, Steinhilber, F., Marinescu, C., Taylor, R. R., Schaub, P., and Campbell, D. A., Direct Evaluation of IEC 61850-9-2 Process Bus Network Performance; *TSG Dec. 2012 1853-1854*
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- Kahrobaeian, A.**, and Mohamed, Y. A.-R. I., Suppression of Interaction Dynamics in DG Converter-Based Microgrids Via Robust System-Oriented Control Approach; *TSG Dec. 2012 1800-1811*
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- Kamwa, I.**, Samantaray, S. R., and Joos, G., On the Accuracy Versus Transparency Trade-Off of Data-Mining Models for Fast-Response PMU-Based Catastrophe Predictors; *TSG March 2012 152-161*
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- Khodayar, M. E.**, Barati, M., and Shahidehpour, M., Integration of High Reliability Distribution System in Microgrid Operation; *TSG Dec. 2012 1997-2006*
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- Kulkarni, P.**, Gormus, S., Fan, Z., and Ramos, F., AMI Mesh Networks—A Practical Solution and Its Performance Evaluation; *TSG Sept. 2012 1469-1481*
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- Kuzlu, M.**, Pipattanasomporn, M., and Rahman, S., Hardware Demonstration of a Home Energy Management System for Demand Response Applications; *TSG Dec. 2012 1704-1711*
- Kwasinski, A.**, Krishnamurthy, V., Song, J., and Sharma, R., Availability Evaluation of Micro-Grids for Resistant Power Supply During Natural Disasters; *TSG Dec. 2012 2007-2018*
- Kwasinski, A.**, see Uriarte, F. M., *TSG Dec. 2012 2063-2070*

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Lu, X., Iyer, K. L. V., Mukherjee, K., and Kar, N. C., A Dual Purpose Triangular Neural Network Based Module for Monitoring and Protection in Bi-Directional Off-Board Level-3 Charging of EV/PHEV; *TSG Dec. 2012 1670-1678*
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- Mahmood, H.**, and Jiang, J., Modeling and Control System Design of a Grid Connected VSC Considering the Effect of the Interface Transformer Type; *TSG March 2012 122-134*
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- Masuta, T.**, and Yokoyama, A., Supplementary Load Frequency Control by Use of a Number of Both Electric Vehicles and Heat Pump Water Heaters; *TSG Sept. 2012 1253-1262*
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- Mehrzi-Sani, A.**, and Iravani, R., Constrained Potential Function—Based Control of Microgrids for Improved Dynamic Performance; *TSG Dec. 2012 1885-1892*
- Meira, P. C. M.**, see Dong, M., *TSG June 2012 787-796*
- Meng, F.**, see Heydt, G. T., *TSG June 2012 907-914*
- Mensah, A.**, see Alatrash, H., *TSG June 2012 996-1011*
- Mercado, P. E.**, see Suvire, G. O., *TSG Dec. 2012 1945-1954*
- Michailidis, G.**, see Kallitsis, M. G., *TSG March 2012 162-173*
- Midlam-Mohler, S.**, see Gong, Q., *TSG March 2012 404-412*
- Mili, L.**, see Lin, H., *TSG Sept. 2012 1444-1456*
- Milioudis, A. N.**, Andreou, G. T., and Labridis, D. P., Enhanced Protection Scheme for Smart Grids Using Power Line Communications Techniques—Part I: Detection of High Impedance Fault Occurrence; *TSG Dec. 2012 1621-1630*
- Milioudis, A. N.**, Andreou, G. T., and Labridis, D. P., Enhanced Protection Scheme for Smart Grids Using Power Line Communications Techniques—Part II: Location of High Impedance Fault Position; *TSG Dec. 2012 1631-1640*
- Millar, R. J.**, Kazemi, S., Lehtonen, M., and Saarijarvi, E., Impact of MV Connected Microgrids on MV Distribution Planning; *TSG Dec. 2012 2100-2108*
- Mitani, Y.**, see Bevrani, H., *TSG Dec. 2012 1935-1944*
- Moghe, R.**, Lambert, F. C., and Divan, D., A Novel Low-Cost Smart Current Sensor for Utility Conductors; *TSG June 2012 653-663*
- Moghe, R.**, Lambert, F. C., and Divan, D., Smart “Stick-on” Sensors for the Smart Grid; *TSG March 2012 241-252*
- Mohamed, A.**, see Salehi, V., *TSG Sept. 2012 1394-1404*
- Mohamed, A.**, see Salehi, V., *TSG Sept. 2012 1405-1417*
- Mohamed, A.**, Salehi, V., and Mohammed, O., Real-Time Energy Management Algorithm for Mitigation of Pulse Loads in Hybrid Microgrids; *TSG Dec. 2012 1911-1922*
- Mohamed, Y. A. R. I.**, see Radwan, A. A. A., *TSG Sept. 2012 1213-1225*
- Mohamed, Y. A.-R. I.**, see Radwan, A. A. A., *TSG March 2012 203-216*
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- Mokhtari, H.**, see Ghazanfari, A., *TSG Dec. 2012 1903-1910*
- Molina, M. G.**, see Suvire, G. O., *TSG Dec. 2012 1945-1954*
- Molina-Garcia, A.**, Fuentes, J. A., Gomez-Lazaro, E., Bonastre, A., Campelo, J. C., and Serrano, J. J., Development and Assessment of a Wireless Sensor and Actuator Network for Heating and Cooling Loads; *TSG Sept. 2012 1192-1202*
- Molinski, T.**, see Ashtari, A., *TSG March 2012 341-350*
- Momber, I.**, see Beer, S., *TSG March 2012 517-525*
- Monti, A.**, see Liu, J., *TSG June 2012 915-924*
- Montoya, L. F.**, see Fu, Q., *TSG Dec. 2012 2019-2027*
- Moraes, R. M.**, Hu, Y., Stenbakken, G., Martin, K., Alves, J. E. R., Phadke, A. G., Volskis, H. A. R., and Centeno, V., PMU Interoperability, Steady-State and Dynamic Performance Tests; *TSG Dec. 2012 1660-1669*
- Morais, H.**, see Sousa, T., *TSG March 2012 535-542*
- Mostafa, H. E.**, see Hashiesh, F., *TSG June 2012 645-652*
- Motamedi, A.**, Zareipour, H., and Rosehart, W. D., Electricity Price and Demand Forecasting in Smart Grids; *TSG June 2012 664-674*
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- Mukherjee, K.**, see Lu, X., *TSG Dec. 2012 1923-1934*
- Mukherjee, K.**, see Lu, X., *TSG Dec. 2012 1670-1678*
- Musavi, F.**, Edington, M., Eberle, W., and Dunford, W. G., Evaluation and Efficiency Comparison of Front End AC-DC Plug-in Hybrid Charger Topologies; *TSG March 2012 413-421*
- Muscas, C.**, see Liu, J., *TSG June 2012 915-924*
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- Nakajima, T.**, see Ota, Y., *TSG March 2012 559-564*
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- Ng, B. L.**, see Li, Y., *TSG Dec. 2012 1712-1721*
- Nguyen, C. P.**, and Flueck, A. J., Agent Based Restoration With Distributed Energy Storage Support in Smart Grids; *TSG June 2012 1029-1038*
- Nguyen, T. A.**, see Georgievski, I., *TSG Dec. 2012 2273-2285*
- Nguyen, T. B.**, see Makarov, Y. V., *TSG Sept. 2012 1325-1332*
- Nikolaou, T. G.**, Kolokotsa, D. S., Stavarakis, G. S., and Skias, I. D., On the Application of Clustering Techniques for Office Buildings’ Energy and Thermal Comfort Classification; *TSG Dec. 2012 2196-2210*
- Ning, H.**, see Liu, H., *TSG Dec. 2012 1722-1733*
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- Norman, P. J.**, see Fletcher, S. D. A., *TSG Dec. 2012 2079-2087*
- Nozaki, Y.**, see Takeuchi, A., *TSG June 2012 968-974*
- Nunna, H. S. V. S. K.**, and Doolla, S., Demand Response in Smart Distribution System With Multiple Microgrids; *TSG Dec. 2012 1641-1649*
- Nutaro, J.**, and Protopopescu, V., Calculating Frequency at Loads in Simulations of Electro-Mechanical Transients; *TSG March 2012 233-240*

O

- Oleskovicz, M.**, see Courty, D. V., *TSG Sept. 2012 1353-1361*
- Onar, O. C.**, and Khaligh, A., A Novel Integrated Magnetic Structure Based DC/DC Converter for Hybrid Battery/Ultracapacitor Energy Storage Systems; *TSG March 2012 296-307*
- Ota, Y.**, Taniguchi, H., Nakajima, T., Liyanage, K. M., Baba, J., and Yokoyama, A., Autonomous Distributed V2G (Vehicle-to-Grid) Satisfying Scheduled Charging; *TSG March 2012 559-564*
- Overbye, T. J.**, see Zonouz, S., *TSG Dec. 2012 1790-1799*

P

- Pachanapan, P.**, Anaya-Lara, O., Dysko, A., and Lo, K. L., Adaptive Zone Identification for Voltage Level Control in Distribution Networks With DG; *TSG Dec. 2012 1594-1602*
- Padhee, M.**, Dash, P. K., Krishnanand, K. R., and Rout, P. K., A Fast Gauss-Newton Algorithm for Islanding Detection in Distributed Generation; *TSG Sept. 2012 1181-1191*
- Pagani, G. A.**, see Georgievski, I., *TSG Dec. 2012 2273-2285*
- Pahwa, A.**, see Hopkins, M. D., *TSG June 2012 1047-1054*
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- Pai, M. A.**, see Makarov, Y. V., *TSG Sept. 2012 1325-1332*
- Pang, C.**, Dutta, P., and Kezunovic, M., BEVs/PHEVs as Dispersed Energy Storage for V2B Uses in the Smart Grid; *TSG March 2012 473-482*
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- Pipattanasomporn, M.**, see Shao, S., *TSG March 2012 543-550*
- Pipattanasomporn, M.**, see Arghandeh, R., *TSG Dec. 2012 1955-1962*
- Pipattanasomporn, M.**, Kuzlu, M., and Rahman, S., An Algorithm for Intelligent Home Energy Management and Demand Response Analysis; *TSG Dec. 2012 2166-2173*
- Pipattanasomporn, M.**, see Kuzlu, M., *TSG Dec. 2012 1704-1711*

- Ponci, F.**, see Liu, J., *TSG June 2012 915-924*
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Q

- Qela, B.**, and Mouftah, H. T., Observe, Learn, and Adapt (OLA)—An Algorithm for Energy Management in Smart Homes Using Wireless Sensors and Artificial Intelligence; *TSG Dec. 2012 2262-2272*
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Quinn, C., Zimmerle, D., and Bradley, T. H., An Evaluation of State-of-Charge Limitations and Actuation Signal Energy Content on Plug-in Hybrid Electric Vehicle, Vehicle-to-Grid Reliability, and Economics; *TSG March 2012 483-491*

R

- Radwan, A. A. A.**, and Mohamed, Y. A. R. I., Modeling, Analysis, and Stabilization of Converter-Fed AC Microgrids With High Penetration of Converter-Interfaced Loads; *TSG Sept. 2012 1213-1225*
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Rao, L., Liu, X., Xie, L., and Liu, W., Coordinated Energy Cost Management of Distributed Internet Data Centers in Smart Grid; *TSG March 2012 50-58*
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Rashidinejad, M., see Abdollahi, A., *TSG March 2012 12-25*
Rautiainen, A., Repo, S., Jarventausta, P., Mutanen, A., Vuorilehto, K., and Jalkanen, K., Statistical Charging Load Modeling of PHEVs in Electricity Distribution Networks Using National Travel Survey Data; *TSG Dec. 2012 1650-1659*
Ray, P. K., Kishor, N., and Mohanty, S. R., Islanding and Power Quality Disturbance Detection in Grid-Connected Hybrid Power System Using Wavelet and S-Transform; *TSG Sept. 2012 1082-1094*
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- Rintanen, J.**, see Botea, A., *TSG June 2012 583-593*
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Romero Aguero, J., Guest Editorial Special Section on Applications of Smart Grid Technologies on Power Distribution Systems; *TSG June 2012 849*
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S

- Saad, W.**, see Tushar, W., *TSG Dec. 2012 1767-1778*
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Salehi, V., Mohamed, A., Mazloomzadeh, A., and Mohammed, O. A., Laboratory-Based Smart Power System, Part I: Design and System Development; *TSG Sept. 2012 1394-1404*
Salehi, V., Mohamed, A., Mazloomzadeh, A., and Mohammed, O. A., Laboratory-Based Smart Power System, Part II: Control, Monitoring, and Protection; *TSG Sept. 2012 1405-1417*
Salles, D., see Lin, S., *TSG Sept. 2012 1562-1570*
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Savaghebi, M., Jalilian, A., Vasquez, J. C., and Guerrero, J. M., Secondary Control Scheme for Voltage Unbalance Compensation in an Islanded Droop-Controlled Microgrid; *TSG June 2012 797-807*
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Sortomme, E., see Al-Awami, A. T., *TSG March 2012 453-462*
Sousa, T., Morais, H., Vale, Z., Faria, P., and Soares, J., Intelligent Energy Resource Management Considering Vehicle-to-Grid: A Simulated Annealing Approach; *TSG March 2012 535-542*
Spitsa, V., Ran, X., Salcedo, R., Martinez, J. F., Uosef, R. E., de Leon, F., Czarkowski, D., and Zabar, Z., On the Transient Behavior of Large-Scale Distribution Networks During Automatic Feeder Reconfiguration; *TSG June 2012 887-896*
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Steen, D., Tuan, L. A., Carlson, O., and Bertling, L., Assessment of Electric Vehicle Charging Scenarios Based on Demographical Data; *TSG Sept. 2012 1457-1468*
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Stenbakken, G., see Moraes, R. M., *TSG Dec. 2012 1660-1669*
Stephen, B., and Galloway, S. J., Domestic Load Characterization Through Smart Meter Advance Stratification; *TSG Sept. 2012 1571-1572*
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Suivre, G. O., Molina, M. G., and Mercado, P. E., Improving the Integration of Wind Power Generation Into AC Microgrids Using Flywheel Energy Storage; *TSG Dec. 2012 1945-1954*
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- A DC Arc Model for Series Faults in Low Voltage Microgrids. *Uriarte, F. M.*, +, *TSG Dec. 2012 2063-2070*
- Enhanced Protection Scheme for Smart Grids Using Power Line Communications Techniques—Part I: Detection of High Impedance Fault Occurrence. *Milioudis, A. N.*, +, *TSG Dec. 2012 1621-1630*
- Optimizing the Roles of Unit and Non-unit Protection Methods Within DC Microgrids. *Fletcher, S. D. A.*, +, *TSG Dec. 2012 2079-2087*
- Time-Domain Algorithm for Locating Evolving Faults. *Kulkarni, S.*, +, *TSG Dec. 2012 1584-1593*

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- Wide-Area Damping Control of Power Systems Using Dynamic Clustering and TCSC-Based Redesigns. *Chakraborty, A.*, +, *TSG Sept. 2012 1503-1514*

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Hierarchical Fuzzy Logic System for Implementing Maintenance Schedules of Offshore Power Systems. *Chang, C. S., +, TSG March 2012 3-11*

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Modeling and Control System Design of a Grid Connected VSC Considering the Effect of the Interface Transformer Type. *Mahmood, H., +, TSG March 2012 122-134*

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Convex programming

Energy Management Optimization in a Battery/Supercapacitor Hybrid Energy Storage System. *Choi, M.-E., +, TSG March 2012 463-472*

Voltage/VAR Control in Distribution Networks via Reactive Power Injection Through Distributed Generators. *Deshmukh, S., +, TSG Sept. 2012 1226-1234*

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A Cooperative Multiagent Framework for Self-Healing Mechanisms in Distribution Systems. *Zidan, A., +, TSG Sept. 2012 1525-1539*

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Cost-Benefit Analyses of Active Distribution Network Management, Part II: Investment Reduction Analysis. *Hu, Z., +, TSG Sept. 2012 1075-1081*

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Real-Time Energy Management Algorithm for Mitigation of Pulse Loads in Hybrid Microgrids. *Mohamed, A., +, TSG Dec. 2012 1911-1922*

Statistical Charging Load Modeling of PHEVs in Electricity Distribution Networks Using National Travel Survey Data. *Rautiainen, A., +, TSG Dec. 2012 1650-1659*

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Active Power Management of Multihybrid Fuel Cell/Supercapacitor Power Conversion System in a Medium Voltage Microgrid. *Ghazanfari, A., +, TSG Dec. 2012 1903-1910*

Energy Management Optimization in a Battery/Supercapacitor Hybrid Energy Storage System. *Choi, M.-E., +, TSG March 2012 463-472*

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Electricity Price and Demand Forecasting in Smart Grids. *Motamedi, A.*, +, *TSG June 2012 664-674*

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Development and Assessment of a Wireless Sensor and Actuator Network for Heating and Cooling Loads. *Molina-Garcia, A.*, +, *TSG Sept. 2012 1192-1202*

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Residential Load Control: Distributed Scheduling and Convergence With Lost AMI Messages. *Gatsis, N.*, +, *TSG June 2012 770-786*

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Distributed Energy Resources Impact on Distribution System Reliability Under Load Transfer Restrictions. *Leite da Silva, A. M.*, +, *TSG Dec. 2012 2048-2055*

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Discrete event simulation

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Discrete time systems

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A Wavelet/PSO Based Voltage Regulation Scheme and Suitability Analysis of Copper- and Aluminum-Rotor Induction Machines for Distributed Wind Power Generation. *Lu, X.*, +, *TSG Dec. 2012 1923-1934*

Distortion

An Intelligent Control Strategy for Power Factor Compensation on Distorted Low Voltage Power Systems. *Lin, S.*, +, *TSG Sept. 2012 1562-1570*

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A Flexible Control Strategy for Grid-Connected and Islanded Microgrids With Enhanced Stability Using Nonlinear Microgrid Stabilizer. *Ashabani, S. M.*, +, *TSG Sept. 2012 1291-1301*

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A Two Ways Communication-Based Distributed Control for Voltage Regulation in Smart Distribution Feeders. *Farag, H. E. Z.*, +, *TSG March 2012 271-281*

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Battery Energy Storage for Enabling Integration of Distributed Solar Power Generation. *Hill, C. A.*, +, *TSG June 2012 850-857*

Centralized Control for Parallel Operation of Distributed Generation Inverters in Microgrids. *Tan, K. T.*, +, *TSG Dec. 2012 1977-1987*

Coordinated Control of Distributed Energy Storage System With Tap Changer Transformers for Voltage Rise Mitigation Under High Photovoltaic Penetration. *Liu, X.*, +, *TSG June 2012 897-906*

Cost-Benefit Analyses of Active Distribution Network Management, Part I: Annual Benefit Analysis. *Hu, Z.*, +, *TSG Sept. 2012 1067-1074*

Decentralized Reactive Power Control for Advanced Distribution Automation Systems. *Elkhatib, M. E.*, +, *TSG Sept. 2012 1482-1490*

Impact of MV Connected Microgrids on MV Distribution Planning. *Millar, R. J.*, +, *TSG Dec. 2012 2100-2108*

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Neural Networks to Improve Distribution State Estimation—Volt Var Control Performances. *Biserica, M.*, +, *TSG Sept. 2012 1137-1144*

Novel Integration of Wind Generator-Energy Storage Systems Within Microgrids. *Fazeli, M.*, +, *TSG June 2012 728-737*

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Operation of a Utility Connected Microgrid Using an IEC 61850-Based Multi-Level Management System. *Ruiz-Alvarez, A.*, +, *TSG June 2012 858-865*

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Real-Time Monitoring and Economic Dispatch of Smart Distribution Grids: High Performance Algorithms for DMS Applications. *Vargas, A.*, +, *TSG June 2012 866-877*

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- Modes of Operation and System-Level Control of Single-Phase Bidirectional PWM Converter for Microgrid Systems. *Dong, D.*, +, *TSG March 2012 93-104*
- Power Sharing and Control in Distributed Generation With Wireless Sensor Networks. *Majumder, R.*, +, *TSG June 2012 618-634*
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A Simple Scheme for Wide Area Detection of Impending Voltage Instability. *Sodhi, R.*, +, *TSG June 2012 818-827*

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An Evaluation of State-of-Charge Limitations and Actuation Signal Energy Content on Plug-in Hybrid Electric Vehicle, Vehicle-to-Grid Reliability, and Economics. *Quinn, C.*, +, *TSG March 2012 483-491*

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Assessment of Impacts of PHEV Charging Patterns on Wind-Thermal Scheduling by Stochastic Unit Commitment. *Liu, C.*, +, *TSG June 2012 675-683*

Battery Energy Storage for Enabling Integration of Distributed Solar Power Generation. *Hill, C. A.*, +, *TSG June 2012 850-857*

Calculating Frequency at Loads in Simulations of Electro-Mechanical Transients. *Nutaro, J.*, +, *TSG March 2012 233-240*

Decentralized Plug-in Electric Vehicle Charging Selection Algorithm in Power Systems. *Wen, C.-K.*, +, *TSG Dec. 2012 1779-1789*

Flexible Charging Optimization for Electric Vehicles Considering Distribution Grid Constraints. *Sundstrom, O.*, +, *TSG March 2012 26-37*

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Islanding and Power Quality Disturbance Detection in Grid-Connected Hybrid Power System Using Wavelet and *S*-Transform. *Ray, P. K.*, +, *TSG Sept. 2012 1082-1094*

IT Infrastructure for Providing Energy-as-a-Service to Electric Vehicles. *Sarangi, S. R.*, +, *TSG June 2012 594-604*

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Optimal PMU Placement by an Equivalent Linear Formulation for Exhaustive Search. *Azizi, S.*, +, *TSG March 2012 174-182*

Optimal Scheduling of Vehicle-to-Grid Energy and Ancillary Services. *Sor-tomme, E.*, +, *TSG March 2012 351-359*

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Supplementary Load Frequency Control by Use of a Number of Both Electric Vehicles and Heat Pump Water Heaters. *Masuta, T.*, +, *TSG Sept. 2012 1253-1262*

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Data Mining for Electricity Price Classification and the Application to Demand-Side Management. *Huang, D.*, +, *TSG June 2012 808-817*

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Electricity Price and Demand Forecasting in Smart Grids. *Motamedi, A.*, +, *TSG June 2012 664-674*

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Scheduling of Wireless Metering for Power Market Pricing in Smart Grid. *Li, H.*, +, *TSG Dec. 2012 1611-1620*

The Evolution of Plug-In Electric Vehicle-Grid Interactions. *Tuttle, D. P.*, +, *TSG March 2012 500-505*

Towards a Unified Operational Value Index of Energy Storage in Smart Grid Environment. *Thatte, A. A.*, +, *TSG Sept. 2012 1418-1426*

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Vehicle-to-Aggregator Interaction Game. *Wu, C.*, +, *TSG March 2012 434-442*

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Power meters

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Power overhead lines

- A Fault Location Technique for Two-Terminal Multisection Compound Transmission Lines Using Synchronized Phasor Measurements. *Liu, C.-W.*, +, *TSG March 2012 113-121*
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- Economics of Electric Vehicle Charging: A Game Theoretic Approach. *Tushar, W.*, +, *TSG Dec. 2012 1767-1778*
- Integration of High Reliability Distribution System in Microgrid Operation. *Khodayar, M. E.*, +, *TSG Dec. 2012 1997-2006*
- Intelligent Dispatch for Distributed Renewable Resources. *Hopkins, M. D.*, +, *TSG June 2012 1047-1054*
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- Optimized Bidding of a EV Aggregation Agent in the Electricity Market. *Bessa, R. J.*, +, *TSG March 2012 443-452*
- Towards a Unified Operational Value Index of Energy Storage in Smart Grid Environment. *Thatte, A. A.*, +, *TSG Sept. 2012 1418-1426*
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- Coordinated Energy Cost Management of Distributed Internet Data Centers in Smart Grid. *Rao, L.*, +, *TSG March 2012 50-58*
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- Towards Optimal Electric Demand Management for Internet Data Centers. *Li, J.*, +, *TSG March 2012 183-192*

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- A Controlled Filtering Method for Estimating Harmonics of Off-Nominal Frequencies. *Marques, C. A. G.*, +, *TSG March 2012 38-49*
- A Fast Gauss-Newton Algorithm for Islanding Detection in Distributed Generation. *Padhee, M.*, +, *TSG Sept. 2012 1181-1191*
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- Fully Distributed State Estimation for Wide-Area Monitoring Systems. *Xie, L.*, +, *TSG Sept. 2012 1154-1169*
- GECO: Global Event-Driven Co-Simulation Framework for Interconnected Power System and Communication Network. *Lin, H.*, +, *TSG Sept. 2012 1444-1456*
- Generation-Load Mismatch Detection and Analysis. *Gardner, R. M.*, +, *TSG March 2012 105-112*
- Online Monitoring of Substation Grounding Grid Conditions Using Touch and Step Voltage Sensors. *Long, X.*, +, *TSG June 2012 761-769*

Power Sharing and Control in Distributed Generation With Wireless Sensor Networks. *Majumder, R.*, +, *TSG June 2012 618-634*

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Synchronized Sampling Technology-Based Compensation for Network Effects in WAMS Communication. *Wang, S.*, +, *TSG June 2012 837-845*

Utilizing a Smart Grid Monitoring System to Improve Voltage Quality of Customers. *McBee, K. D.*, +, *TSG June 2012 738-743*

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Power system reliability

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Design of Emergency Demand Response Program Using Analytic Hierarchy Process. *Kim, D.-M.*, +, *TSG June 2012 635-644*

Enhanced Protection Scheme for Smart Grids Using Power Line Communications Techniques—Part I: Detection of High Impedance Fault Occurrence. *Milioudis, A. N.*, +, *TSG Dec. 2012 1621-1630*

Impact of WAMS Malfunction on Power System Reliability Assessment. *Aminifar, F.*, +, *TSG Sept. 2012 1302-1309*

Improving Reliability of Islanded Distribution Systems With Distributed Renewable Energy Resources. *Brown, H. E.*, +, *TSG Dec. 2012 2028-2038*

Integration of High Reliability Distribution System in Microgrid Operation. *Khodayar, M. E.*, +, *TSG Dec. 2012 1997-2006*

Online Monitoring of Substation Grounding Grid Conditions Using Touch and Step Voltage Sensors. *Long, X.*, +, *TSG June 2012 761-769*

Reliability Evaluation of Phasor Measurement Unit Using Monte Carlo Dynamic Fault Tree Method. *Zhang, P.*, +, *TSG Sept. 2012 1235-1243*

Reliability-Constrained Optimal Sizing of Energy Storage System in a Microgrid. *Bahramirad, S.*, +, *TSG Dec. 2012 2056-2062*

Smart “Stick-on” Sensors for the Smart Grid. *Moghe, R.*, +, *TSG March 2012 241-252*

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Incorporating Demand Response With Spinning Reserve to Realize an Adaptive Frequency Restoration Plan for System Contingencies. *Chang-Chien, L.-R.*, +, *TSG Sept. 2012 1145-1153*

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Online Monitoring of Substation Grounding Grid Conditions Using Touch and Step Voltage Sensors. *Long, X.*, +, *TSG June 2012 761-769*

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Intelligent Frequency Control in an AC Microgrid: Online PSO-Based Fuzzy Tuning Approach. *Bevrani, H.*, +, *TSG Dec. 2012 1935-1944*

Laboratory-Based Smart Power System, Part II: Control, Monitoring, and Protection. *Salehi, V.*, +, *TSG Sept. 2012 1405-1417*

Linear Active Stabilization of Converter-Dominated DC Microgrids. *Radwan, A. A. A.*, +, *TSG March 2012 203-216*

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Guest Editorial Special Section on Transportation Electrification and Vehicle-to-Grid Applications. *Emadi, A.*, +, *TSG March 2012 295*

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Enhanced Protection Scheme for Smart Grids Using Power Line Communications Techniques—Part I: Detection of High Impedance Fault Occurrence. *Milioudis, A. N.*, +, *TSG Dec. 2012 1621-1630*

Enhanced Protection Scheme for Smart Grids Using Power Line Communications Techniques—Part II: Location of High Impedance Fault Position. *Milioudis, A. N.*, +, *TSG Dec. 2012 1631-1640*

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A Distributed Demand Response Algorithm and Its Application to PHEV Charging in Smart Grids. *Fan, Z.*, +, *TSG Sept. 2012 1280-1290*

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A System Architecture for Autonomous Demand Side Load Management in Smart Buildings. *Costanzo, G. T.*, +, *TSG Dec. 2012 2157-2165*

An Optimized EV Charging Model Considering TOU Price and SOC Curve. *Cao, Y.*, +, *TSG March 2012 388-393*

Automatic Generation Control Structure for Smart Power Grids. *Keyhani, A.*, +, *TSG Sept. 2012 1310-1316*

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Intelligent Dispatch for Distributed Renewable Resources. *Hopkins, M. D.*, +, *TSG June 2012 1047-1054*

Load Scheduling and Dispatch for Aggregators of Plug-In Electric Vehicles. *Wu, D.*, +, *TSG March 2012 368-376*

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Aggregated-Proofs Based Privacy-Preserving Authentication for V2G Networks in the Smart Grid. *Liu, H.*, +, *TSG Dec. 2012 1722-1733*

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A Randomized Response Model for Privacy Preserving Smart Metering. *Wang, S.*, +, *TSG Sept. 2012 1317-1324*

An Evaluation of State-of-Charge Limitations and Actuation Signal Energy Content on Plug-in Hybrid Electric Vehicle, Vehicle-to-Grid Reliability, and Economics. *Quinn, C.*, +, *TSG March 2012 483-491*

Supply-Adequacy-Based Optimal Construction of Microgrids in Smart Distribution Systems. *Arefffar, S. A.*, +, *TSG Sept. 2012 1491-1502*

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Intelligent DC Microgrid With Smart Grid Communications: Control Strategy Consideration and Design. *Wang, B. C.*, +, *TSG Dec. 2012 2148-2156*

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Aggregated-Proofs Based Privacy-Preserving Authentication for V2G Networks in the Smart Grid. *Liu, H.*, +, *TSG Dec. 2012 1722-1733*

Bandwidth and Latency Requirements for Smart Transmission Grid Applications. *Kansal, P.*, +, *TSG Sept. 2012 1344-1352*

Decentralized Reactive Power Control for Advanced Distribution Automation Systems. *Elkhatib, M. E.*, +, *TSG Sept. 2012 1482-1490*

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Coordinated Energy Cost Management of Distributed Internet Data Centers in Smart Grid. *Rao, L.*, +, *TSG March 2012 50-58*

Frequency-Hopping Based Communication Network With Multi-Level QoS in Smart Grid: Code Design and Performance Analysis. *Zeng, Q.*, +, *TSG Dec. 2012 1841-1852*

Towards Optimal Electric Demand Management for Internet Data Centers. *Li, J.*, +, *TSG March 2012 183-192*

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