

996 IEEE TRANSACTIONS ON SMART GRID, VOL. 4, NO. 2, JUNE 2013 A Microgrid Energy Management System Based on the Rolling Horizon Strategy Rodrigo Palma-Behnke, Senior Member, IEEE, Carlos Benavides, Fernando Lanas, Bernardo Severino, Lorenzo Reyes, Jacqueline Llanos, Student Member, IEEE, and Doris Saez, Senior Member, IEEE Abstract--A ...

Rome, Calama, May 31st, 2017 - Enel, through its subsidiary Enel Green Power Chile Ltda. ("EGPC") has started operations at the world's first 100% emission-free "plug-and-play" ...

The IEEE Smart Grid Bulletin Compendium "Smart Grid: The Next Decade" is the first of its kind promotional compilation featuring 32 "best of the best" insightful articles from recent issues of the IEEE Smart Grid Bulletin and will be the go-to resource for industry professionals for years to come. Click here to read "Smart Grid: The Next Decade";

The 24x7 solar-plus-storage microgrid now up and running at the Cerro Pabellon geothermal power plant in Chile's high and dry (very, very dry) Antofagasta region marks a distributed clean energy milestone for Enel Green ...

By Jean Paul Zalaquett Climate change is a challenge for governments, society and the business world, and therefore, every one of us from our sector should be very attentive in identifying and using all the tools that are available to us in order to confront this challenge. The fourth report of the Intergovernmental Panel on Climate Change identified energy efficiency as ...

Abstract. The conceptual prediction approaches for solar energy and Photovoltaic energy are thoroughly reviewed in this work. Employing enhanced gated recurrent units (GRUs) and recurrent neural networks (RNNs) for both univariate and multivariate cases, this research proposes a unique technique for the forecasting of electrical load for a smart grid.

The technological development and the blessing of information and communication technology converts the MG technology to a smarter one, termed as smart grid (SG) and virtual power ...

4 SMART GRID EVOLUTION. Smart grid is the next generation grid of MG with the aid of ICT to increase the performance of grid operation and customer services. 73 The integration of smart devices and technologies not only increases the production capacity by also creating a balance between production and demand with the help of bidirectional ...

A new model based on energy homeostasis for power control and energy management using tariffs differentiation as incentive, considered by ENEL, the largest electric utility in Chile, is presented, providing a

good and safe option for installing DG solutions to ...

Smart grid technology can address multiple issues at once as well as act and react to specific problems independently. Smart grid technology is highly useful in today's energy sector. Consumers with electric vehicles benefit from smart grid technology that allows them to have lower rates when charging their vehicles. The smart grid aims to ...

Modern grids include variable generation assets, such as wind and solar, and distributed energy storage systems, such as grid-scale batteries. These grid components introduce additional uncertainty to grid operations and call for more intelligent and robust control algorithms in ...

Die Begriffe Microgrids und Smart Grid werden oft als Synonyme verwendet. Auch wenn ein Netz gleichzeitig ein Microgrid und ein Smart Grid sein kann, ist die Bedeutung nicht ganz dieselbe. ...

While it has been argued that microgrids are a better approach to contain and manage local problems [102] and could even serve as a possible pathway to a "self-healing" smart grid of the future [103], it is possible that society will find grid architecture paradigms like "smart supergrids" [104], [105] or "virtual power plants" [44] ...

Una de las principales diferencias de las redes eléctricas inteligentes respecto a la red eléctrica tradicional es que el sistema smart grid es bidireccional, es decir, transmite la electricidad en ambos sentidos esta manera, tanto los ...

The technological development and the blessing of information and communication technology converts the MG technology to a smarter one, termed as smart grid (SG) and virtual power plant, by ...

A microgrid is capable of operating in grid-connected and stand-alone modes, and handling the transitions between these two modes [19], [20]. In the grid-connected mode, the power deficit can be supplied by the main grid and excess power generated in the microgrid can be traded with the main grid and can provide ancillary services.

Web: <https://www.solar-system.co.za>

