

Energy Update

October 2009

Welcome to the latest issue of the Energy Update, a monthly round-up of books, articles, standards, reports and other resources available from the Energy Library collection.

This month we feature a special section on [Maintenance of power generation plant and equipment](#).

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Kat McAra, Current Awareness Advisor

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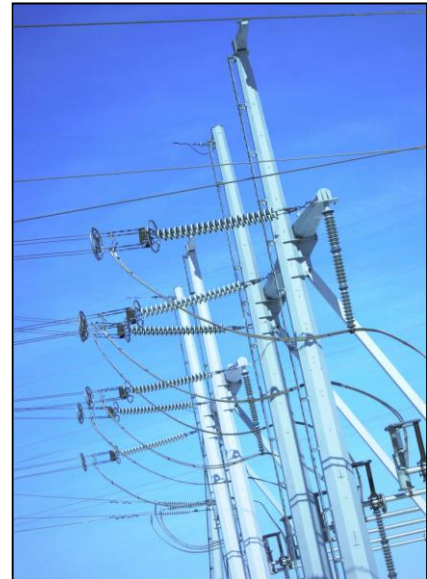
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New Items for Loan

Wind energy international: 2009/2010. Bonn, Germany: World Wind Energy Association, 2009

This is a comprehensive update on wind energy around the world. Almost three-quarters of the book consists of country reports; New Zealand's consists of 6 pages covering information, legislation and policy, and wind energy projects as at December 2008. The remainder of the book is grouped under headings such as Industrial trends, Grid connected systems and wind farms, and Integrating renewable energies. In the latter section, there is an article on Dardesheim in Germany. The town produces 12 times more than its total energy needs and successfully uses the status of being the "Town of renewable energy" to attract tourists.

(To borrow this book email library@energylibrary.org.nz Ref: **1009-Loan1**)

Energy policy review of Indonesia. Paris: IEA, 2008

This publication provides a thorough review of Indonesia's energy sector.

(To borrow this book email library@energylibrary.org.nz Ref: **1009-Loan2**)

AS/NZS 2381: Part 1: 2005. Electrical equipment for explosive atmospheres: Selection, installation and maintenance: Part 1: General requirements.

(To borrow this standard email library@energylibrary.org.nz Ref: **1009-Loan3**)

ANSI C29.7: 1996. American national standard for wet-process porcelain insulators-high-voltage line - post type.

(To borrow this standard email library@energylibrary.org.nz Ref: **1009-Loan4**)

IEC TS 61463: 1996. Bushings: Seismic qualification.

(To borrow this standard email library@energylibrary.org.nz Ref: **1009-Loan5**)

IEC 61245: 1993. Artificial pollution tests on high-voltage insulators to be used on d.c. systems.

(To borrow this standard email library@energylibrary.org.nz Ref: **1009-Loan6**)

Special Journal Issues

Solar photovoltaics. IEEE Power & Energy; May/June 2009 Vol 7 (3).

This special issue contains six articles on various aspects of solar photovoltaics.

(To borrow this whole issue email library@energylibrary.org.nz Ref: **1009-Loan7**)

Power magazine Top Plants 2009 – This Oct special issue is available [online](#).

New Management, Marketing and HR Articles

The long view and the art of leadership. Light, Liz. *E.NZ magazine (Institution of Professional Engineers New Zealand, IPENZ)*; May/June 2009 Vol. 10 (3), p.20-23

Dr Kevin Thompson leads Opus International Consultants, one of New Zealand's most successful engineering consultancies. He talks with Liz Light about communication, ethics and leadership.

(To request: email library@energylibrary.org.nz Ref: **1009-Leader**)

Better than brainstorming? Potential contextual boundary conditions to brainwriting for idea generation in organizations. Heslin, Peter A. *Journal of Occupational & Organizational Psychology*; Mar 2009, Vol. 82 (1), p.129-145

(To request: email library@energylibrary.org.nz Ref: **1009-Idea**)

Mastering the art of giving advice. Lukaszewski, James E. *Leader to Leader*; Fall 2008, Vol. 2008 (50), p.45-50

(To request: email library@energylibrary.org.nz Ref: **1009-Advice**)

Making time off predictable & required. Perlow, Leslie A.; Porter, Jessica L. *Harvard Business Review*; Vol. 87 (10) Oct 2009, p.102-109

People in professional services believe a 24/7 work ethic is essential for getting ahead -- and so they work 60-plus hours a week and stay tethered to their BlackBerrys. This perpetuates a vicious cycle: Responsiveness breeds the need for more responsiveness. When people are always "on," responsiveness becomes ingrained in the way they work, expected by clients and partners, and even institutionalized in performance metrics. There is no impetus to question whether the work actually requires 24/7 responsiveness; on the contrary, people work harder and longer, without stopping to explore how they could work better. But four years of research conducted by the authors in several North American offices of the Boston Consulting Group suggests that consultants and other professionals can provide the highest standards of service and still have planned, uninterrupted time off. They can do this even in times of recession. In this article, Perlow and Porter outline the lessons from BCG's implementation of predictable time off -- namely, impose a strict mechanism for taking days and nights off, encourage lots of talk about what's working and what isn't, promote experimentation with different ways of working, and insist on top-level support.

(To request: email library@energylibrary.org.nz Ref: **1009-Time**)

Professional characteristics communicated by formal versus casual workplace attire. Cardon, Peter W.; Okoro, Ephraim A. *Business Communication Quarterly*; Sep 2009, Vol. 72 (3), p.355-360

(To request: email library@energylibrary.org.nz Ref: **1009-Attire**)



Best before forty: The shelf life of an engineer. D. Kennedy. *Engineering Management Journal*; Volume 21 (1), Mar 2009, p.19-26

Once engineers reach their mid-40s, they exit the profession in large numbers. Managers should be concerned by this tacit knowledge that is leaving the company. Mature engineering graduates, both in and out of the profession, participated in semi-structured interviews. Factors that possibly explain the high attrition rate were identified. This information could be used by managers to help them to better retain mature engineers.

(To request: email library@energylibrary.org.nz Ref: **1009-Forty**)

Soaring natural gas and electricity costs require customer communications. de La Garza, Henry A. *Natural Gas & Electricity*; Sep 2008, Vol. 25 (2), p.31-32

(To request: email library@energylibrary.org.nz Ref: **1009-Gas**)

Don't let layoffs ruin customer service. *Harvard Management Update*; Mar 2009, Vol. 14 (3), p.1-5

(To request: email library@energylibrary.org.nz Ref: **1009-Service**)

Objectively assessing risk in a complex world. Lyons, Jan. *Leadership & Management in Engineering*; Oct 2008, Vol. 8 (4), p.231-254

(To request: email library@energylibrary.org.nz Ref: **1009-Risk**)

New Energy and Environment Articles

Exploring the acceptance of a domestic distributed energy market in Australia.

Gardner, J. et al. *Australasian Journal of Environmental Management*; Jun 2008, Vol. 15 (2), p.93-103

A distributed energy system involves the use of small local power generators to supplement or replace the centralised domestic electricity supply. The widespread adoption of small local power generators presents a path for early action on climate change by reducing the emissions associated with a centralised fossil fuel electricity system. A strong potential influence on the emergence of a domestic distributed energy market in Australia is the willingness of the public to accept distributed generation. To study the potential acceptance of distributed energy we considered the environmental concern and consumer technology adoption literature. We then surveyed 706 householders from four Australian states during 2007. Our analysis of these data pointed to the public's willingness to accept the use of distributed generators, identified attitudinal and demographic characteristics related to higher acceptance, and assessed preferences regarding the technology's features. These findings provide a basis for understanding the behaviour of the public in the advent of a domestic distributed energy market. Implications are presented for decision-makers involved with domestic distributed energy and for researchers of products that have both environmental and technological characteristics.

(To request: email library@energylibrary.org.nz Ref: **1009-Energy**)

Counting the costs of going green [power renewables]. Newman, Nicholas. *Engineering & Technology*; 7/26/2009, Vol. 4 (13), p.48-51

The race is on to increase the use of renewable energy, but as Nicholas Newman explains, someone will have to foot the bill.

(To request: email library@energylibrary.org.nz Ref: **1009-Green**)

Opportunities for pumped storage: Supporting renewable energy goals - This July 2009 *Hydro Review* article is available [online](#).

Risk assessment method for submerged weeds in New Zealand hydroelectric lakes.

Clayton, J.; Champion, P. *Hydrobiologia*; Oct 2006, Vol. 570 (1), p.183-188

(To request: email library@energylibrary.org.nz Ref: **1009-Weeds**)

Local hero: Richard Body: Torrs Hydro New Mills. This June 2009 *The Ecologist* article about the UK's first community-funded hydroelectric scheme is available [online](#).

Neptune wants to rule the deep. Newman, Keith. *E.NZ magazine (Institution of Professional Engineers New Zealand, IPENZ)*; Jul/Aug 2009 Vol. 10 (4), p.42-45

Rather than looking up to the sun, to the winds ranging across the landscape, or across to our lakes and rivers to generate electricity, Keith Newman found a couple of entrepreneurial Christchurch scientists who believe the answer lies below, in the deep ocean currents off Cook Strait.

(To request: email library@energylibrary.org.nz Ref: **1009-Cook**)

Photovoltaics: Added value of architectural integration. Bahaj, A. S. et al. *Institution of Civil Engineers. Proceedings - Energy*; May 2007 Vol. 160 (2), p.59-69
(To request: email library@energylibrary.org.nz Ref: **1009-PV**)



Special focus on solar energy. The Sept 2009 IPENZ Engineering Update included a section of articles on solar energy. You can find it on our [newsletters page](#) or the direct link to the PDF is [here](#).

Advanced composite materials in wind turbine applications: Recent R&D activities. Hansen, P.; Giannis, S. *Energy Materials*; Mar 2008, Vol. 3 (1), p.1-4
(To request: email library@energylibrary.org.nz Ref: **1009-Turbine**)

Visual impact evaluation methods of wind parks: Application for a Greek Island. Tsoutsos, Theocharis et al. *Wind Engineering*; Jan 2009, Vol. 33 (1), p.83-91
(To request: email library@energylibrary.org.nz Ref: **1009-Visual**)

Will hydrogen always be the fuel of the future? Strahan, David. *Energy World (Energy Institute)*; Apr 2009 (370), p.16-17
There has been much debate in recent years about the prospects for a hydrogen-based energy economy. Here, the author looks at recent developments and weighs the arguments.
(To request: email library@energylibrary.org.nz Ref: **1009-Hydrogen**)

Energy farming with willow near Taupo. McIvor, Ian et al. *New Zealand Tree Grower*; Feb 2009, Vol. 30 (1), p.41-42
(To request: email library@energylibrary.org.nz Ref: **1009-Bioenergy**)

Conversion of combustible municipal solid waste to methyl alcohol: An environmentally friendly technology. Chass, Gregory A.; Csizmadia, Imre G. *International Journal of Environmental Studies*; Oct 2008, Vol. 65 (5), p.655-665
(To request: email library@energylibrary.org.nz Ref: **1009-Waste**)

Biorefining: Computer aided tools for sustainable design and analysis of bioethanol production. M. Alvarado-Morales et al. *Chemical Engineering Research and Design*; Vol. 87 (9), Sept 2009, p.1171-1183
(To request: email library@energylibrary.org.nz Ref: **1009-Ethanol**)

Smart charging essential to integrating plug-in electric vehicles. Clark, John. *Metering International*; (2) 2009, p.32-33
(To request: email library@energylibrary.org.nz Ref: **1009-Plug**)

Geothermal power generation in Germany: Challenges for plant and materials engineering – this 20 July 2009 *Renewable Energy Focus* article is available [online](#).

The benefits and costs of new fuels and engines for light-duty vehicles in the United States. Keefe, Ryan et al. *Risk Analysis: An International Journal*; Oct 2008, Vol. 28 (5), p.1141-1154

The authors compare the newer technologies of hybrid-electric vehicles, advanced diesels, and flex-fuel vehicles to the gasoline internal combustion engine.

(To request: email library@energylibrary.org.nz Ref: **1009-Engines**)

The future of natural gas vehicles. *Wall Street Transcript*; 9/21/2009, Vol. 183 (23), p.1-6

An interview with John Roy, senior research analyst at financial services firm Janney Montgomery Scott LLC.

(To request: email library@energylibrary.org.nz Ref: **1009-Vehicles**)

Sustainable management techniques for offshore oil and gas operations. Khan, M. I.; Islam, M. R. *Energy Sources Part B: Economics, Planning & Policy*; Apr 2008, Vol. 3 (2), p.121-132

(To request: email library@energylibrary.org.nz Ref: **1009-Oil**)

Optimal distribution of economic value along the LNG chain from government and investor perspectives. Furlonge, Haydn I. *Energy Exploration & Exploitation*, Dec 2008, Vol. 26 (6), p.397-414

(To request: email library@energylibrary.org.nz Ref: **1009-LNG**)

Environmental characterisation of coal mine waste rock in the field: An example from New Zealand. Hughes, J. et al. *Environmental Geology*; Jun 2007, Vol. 52 (8), p.1501-1509

(To request: email library@energylibrary.org.nz Ref: **1009-Mine**)

The balancing market maker: A tool to enhance liquidity in the French balancing mechanism. Carlos Batlle et al. *The Electricity Journal*; Vol 20 (6), July 2007, p.76-86

The development of a more competition-oriented and less concentrated market structure in France is colliding with the functioning of the balancing market. The authors offer a proposal to improve the balancing market system, with a view to achieving a more flexible, transparent, and competitive structure, which in turn should lead to more efficient and cheaper service, without compromising the bedrock need to maintain system security.

(To request: email library@energylibrary.org.nz Ref: **1009-Market**)

Analyzing effects of generation limits on the equilibrium in the electricity markets.

Kim, Jin-Ho; Park, Jong-Bae. *Electric Power Components & Systems*; Dec 2007, Vol. 35 (12), p.1285-1299

(To request: email library@energylibrary.org.nz Ref: **1009-Limits**)

Electricity regulation in New Zealand: The early stages of a new regime. Barton, Barry. *Journal of Energy & Natural Resources Law*; May 2008, Vol. 26 (2), p.207-233

(To request: email library@energylibrary.org.nz Ref: **1009-Regulation**)

De-carbonizing electricity generation: It won't be easy, cheap, nor enough. Fereidoon P. Sioshansi. *Utilities Policy*; Vol. 17 (3-4), Sept-Dec 2009, p.217-224

De-carbonizing electricity generation is necessary and should be implemented on a massive scale on many fronts and as soon as feasible to avert climate change. But all indications are that this—while necessary—will not be sufficient in the longer term. We must also pay attention to how energy is used, including fundamental changes in lives and lifestyles.

(To request: email library@energylibrary.org.nz Ref: **1009-Carbon**)

Melting down and scaling up: Stabilizing climate change by promoting private sector technology development. Perusse, B. et al. *Review of Policy Research*; Jul 2009, Vol 26 (4), p.511-531

The four technologies used as examples in this article are aircraft engines, wind turbines, solar energy and clean coal technologies.

(To request: email library@energylibrary.org.nz Ref: **1009-Climate**)

Australia's emissions trading scheme: Opportunities and obstacles for linking. Jotzo, Frank; Betz, Regina. *Climate Policy*; 2009, Vol. 9 (4), p.402-414

(To request: email library@energylibrary.org.nz Ref: **1009-Trading**)

Copenhagen's inconvenient truth. Levi, Michael A. *Foreign Affairs*; 01/09/2009, Vol. 88 (5), p.92-104

What hope is there for consensus at the big climate conference in December?

(To request: email library@energylibrary.org.nz Ref: **1009-Copenhagen**)



Global energy challenges. Shearmur, Malcolm. *ABB Review*; 2009/2, p.6-9

An interview with Ernest Moniz (professor of physics at Massachusetts Institute of Technology and director of the MIT Energy Initiative) about global energy supply and demand, energy security and climate change.

(To request: email library@energylibrary.org.nz Ref: **1009-Global**)

Buy-in and social capital: By-products of social impact assessment. Buchan, Dianne. *Impact Assessment & Project Appraisal*; Sep 2003, Vol. 21 (3), p.168-172

Participatory impact assessment is a term frequently used and often abused. It refers to an approach that includes interested and affected parties in deciding indicators and measures of environmental and social impacts, in evaluation of effects and monitoring. Involving communities in a participatory manner facilitates skill transfer, fosters buy-in and creates local social capital. This paper describes a participatory exercise initiated by a local authority (Council) in New Zealand. Based on the reported assessment and that of two others, five essential ingredients are identified for a genuine participatory exercise. Time and flexibility are key components.

(To request: email library@energylibrary.org.nz Ref: **1009-Impact**)

Environmental claims: A guide for industry and advertisers (Part 1). *Business & the Environment with ISO 14000 Updates*; Sep 2009, Vol. 20 (9), p.12-14

(To request: email library@energylibrary.org.nz Ref: **1009-Claims**)

Sustainability entrepreneurs, ecopreneurs and the development of a sustainable economy. Gibbs, David. *Greener Management International*; Winter 2009 (55), p.63-78
(To request: email library@energylibrary.org.nz Ref: **1009-Economy**)

Zero carbon manufacturing facility - towards integrating material, energy, and waste process flows. Ball, P. D. et al. *Institution of Mechanical Engineers (IMECHE) Proceedings part B Journal of Engineering Manufacture*; Sep 2009. Vol. 223 (9), p.1085-1096
(To request: email library@energylibrary.org.nz Ref: **1009-Zero**)

Negative rebound and disinvestment effects in response to an improvement in energy efficiency in the UK economy. Karen Turner. *Energy Economics*; Vol. 31 (5), Sept 2009, p.648-666

This paper uses a computable general equilibrium (CGE) framework to investigate the conditions under which rebound effects may occur in response to increases in energy efficiency in the UK national economy. Previous work for the UK has suggested that rebound effects will occur even where key elasticities of substitution in production are set close to zero. The research reported in this paper involves carrying out a systematic sensitivity analysis, where relative price sensitivity is gradually introduced into the system, focusing specifically on elasticities of substitution in production and trade parameters, in order to determine conditions under which rebound effects become a likely outcome. The main result is that, while there is positive pressure for rebound effects even where (direct and indirect) demands for energy are very price inelastic, this may be partially or wholly offset by negative income, competitiveness and disinvestment effects, which also occur in response to falling energy prices. The occurrence of disinvestment effects is of particular interest. These occur where falling energy prices reduce profitability in domestic energy supply sectors, leading to a contraction in capital stock in these sectors, which may in turn lead to rebound effects that are smaller in the long run than in the short run, a result that runs contrary to the predictions of previous theoretical work in this area.

(To request: email library@energylibrary.org.nz Ref: **1009-Rebound**)

Environmental benchmarking for management of energy and water use: A study of SMEs in the Mediterranean region. Makrinou, Aikaterini et al. *Environmental Quality Management*; Spring 2008, Vol. 17 (3), p.31-44

(To request: email library@energylibrary.org.nz Ref: **1009-SME**)

Reducing on-site energy use [sustainability case study]. Roman Jaques. *Build (BRANZ magazine)*; Jun/July 2009, p.74-75

One of a series of articles about sustainable housing design and construction in Hamilton.

(To request: email library@energylibrary.org.nz Ref: **1009-Case**)

The Mission: Reducing energy use for multiple benefits. *Electrical + Automation Technology (magazine of the New Zealand Electrical Institute)*; Jun/Jul 2009, p.10-13

This article describes how the Mission Estate winery has successfully reduced energy consumption.

(To request: email library@energylibrary.org.nz Ref: **1009-Wine**)

Counting the carbon. Jeffries, Elisabeth. *Environmental Finance*; Jul - Aug 2009 Vol. 10 (9), p.28-29

The author reports on efforts to apply information technology to the tricky business of managing corporate carbon emissions.

(To request: email library@energylibrary.org.nz Ref: **1009-Count**)

Energy feedback in buildings: Improving the infrastructure for demand reduction.

Darby, Sarah. *Building Research & Information*; Sep/Oct 2008, Vol. 36 (5), p.499-508

(To request: email library@energylibrary.org.nz Ref: **1009-Buildings**)

A new wave in heat pump technology. Dey, Shona. *IRHACE Journal: Refrigeration, Heating and Air Conditioning*; Jul/Aug 2009 Vol. 21 (4), p.10-13

(To request: email library@energylibrary.org.nz Ref: **1009-Heat**)

Characterization of residential lighting consumption in the enlarged European Union and policies to save energy. Bertoldi, Paolo; Atanasiu, Bogdan. *International Journal of Green Energy*; 2008, Vol. 5 (1/2), p.15-34

(To request: email library@energylibrary.org.nz Ref: **1009-Light**)

Smart meter infrastructure is keystone of Smart Grid. Spaur, Matthe. *Natural Gas & Electricity*; Oct 2008, Vol. 25 (3), p.23-27

(To request: email library@energylibrary.org.nz Ref: **1009-Meter**)



Circuit breakers go high voltage. Dufournet, Denis. *IEEE Power & Energy*; Jan/Feb 2009 Vol. 7 (1), p.34-40

Over the last 50 years, high-voltage circuit breakers have become more reliable, more efficient, and more compact because the interrupting capability per break has been increased dramatically. These developments have not only produced major savings, but they have also had a massive impact on the layout of substations with respect to space requirements. New types of SF6 interrupting chambers, which implement innovative interrupting principles, have been developed during the last three decades with the objective of reducing the operating energy of the circuit breaker. This has led to reduced stress and wear of the mechanical components and consequently to an increased reliability of circuit breakers. Service experience shows that the expectations of the designers, with respect to reliability and day-to-day operation, have been fulfilled. © 2009 IEEE. Abstract reprinted with permission of the IEEE

(To request: email library@energylibrary.org.nz Ref: **1009-Circuit**)

The utilization of satellite images to identify trees endangering transmission lines.

Kobayashi, Y. et al. *IEEE Transactions on Power Delivery*; Vol 24 (3), July 2009, p.1703-1709

(To request: email library@energylibrary.org.nz Ref: **1009-Trees**)

The value of reducing distribution losses by domestic load-shifting: A network perspective. Rita Shaw et al. *Energy Policy*; Vol 37 (8), Aug 2009, p.3159-3167

(To request: email library@energylibrary.org.nz Ref: **1009-Load**)

Reducing energy losses when transformers are lightly loaded. Nutt, D. *IET Electric Power Applications*; Sep 2007, Vol. 1 (5), p.847-850
(To request: email library@energylibrary.org.nz Ref: **1009-Transformers**)

Want to see more articles? New articles are added to our members' online catalogue every week. Please [contact us](#) if you have forgotten your login details.

Special Topic: Maintenance of power generation plant and equipment

Are you doing too much PM? 16 ways to save time and money on preventive maintenance. Andy Page and George Karalexis. *Asset Management and Maintenance Journal*; Vol. 22 (3) Jul 2009, p.22-27
(To request: email library@energylibrary.org.nz Ref: **1009-Topic1**)



How to keep domestic PV systems working for the long term. Munro, Donna. *Energy World (Energy Institute)*; Feb 2009 (368), p.10-11
While most solar photovoltaic (PV) systems reliably supply power for many years, poor implementation and lack of forward thinking can lead to loss of performance over time. Here, Donna Munro investigates ownership and maintenance measures that can be undertaken to ensure optimisation and reliability in the long term.
(To request: email library@energylibrary.org.nz Ref: **1009-Topic2**)

A performance modeling and decision support system for a feed water unit of a thermal power plant. S. Gupta et al. *South African Journal of Industrial Engineering*; Nov 2008. Vol. 19, (2), p.125-134
(To request: email library@energylibrary.org.nz Ref: **1009-Topic3**)

Effective lubrication practices. Johnson, Mike. *Turbomachinery International*; Nov/Dec 2008 Vol. 49 (7), p.40,42
(To request: email library@energylibrary.org.nz Ref: **1009-Topic4**)

Ant colony optimization for power plant maintenance scheduling optimization: A five-station hydropower system. Wai Kuan Foong et al. *Annals of Operations Research*; Mar 2008 Vol. 159 (1), p.433-450
(To request: email library@energylibrary.org.nz Ref: **1009-Topic5**)

Optical strain monitoring techniques for life assessment of components in power generation plants. Morris, A. et al. *Proceedings of the Institution of Mechanical Engineers - Part A - Power & Energy*; Dec 2007, Vol. 221 (8), p.1141-1152
(To request: email library@energylibrary.org.nz Ref: **1009-Topic6**)

Mechanical cleaning of calcite scaling with rotating control head preventer in a geothermal well. Yenice, H.; Dünya, H. *Energy Exploration & Exploitation*; Dec 2007, Vol. 25 (6), p.451-465
(To request: email library@energylibrary.org.nz Ref: **1009-Topic7**)

Generator maintenance scheduling in power systems using metaheuristic-based hybrid approaches. Keshav P. Dahal; Nopasit Chakpitak. *Electric Power Systems Research*; Vol. 77 (7), May 2007, p.771-779
The effective maintenance scheduling of power system generators is very important for the economical and reliable operation of a power system. This represents a tough scheduling problem which continues to present a challenge for efficient optimization solution techniques. This paper presents the application of metaheuristic approaches, such as a genetic algorithm (GA), simulated annealing (SA) and their hybrid for generator maintenance scheduling (GMS) in power systems using an integer representation.
(To request: email library@energylibrary.org.nz Ref: **1009-Topic8**)

Predicting lifetimes of components in power station engineering plant. Morris, A. et al. *Energy Materials*; Jun 2007, Vol. 2 (2), p.89-94
(To request: email library@energylibrary.org.nz Ref: **1009-Topic9**)

Boiler maintenance made simple. Vance Scott et al. *Electric Perspectives*; May/June 2007. Vol. 32 (3), p.129-130,132
(To request: email library@energylibrary.org.nz Ref: **1009-Topic10**)

A condition-based preventive maintenance arrangement for thermal power plants. S. K. Yang. *Electric Power Systems Research*; Vol. 72 (1) 15 Nov 2004, p.49-62
(To request: email library@energylibrary.org.nz Ref: **1009-Topic12**)

Can we make maintenance decisions on risk analysis results? F. Backlund; J. Hannu. *Journal of Quality in Maintenance Engineering*; 2002 Vol. 8 (1), p.77-91
Discusses a study based on risk analyses performed on a specific hydroelectric plant.
(To request: email library@energylibrary.org.nz Ref: **1009-Topic13**)

Maintenance of power generation plant and equipment: References.

The above is just a sample of articles we hold on this topic. You may receive a longer list of articles by emailing us at library@energylibrary.org.nz with the **Ref: 1009-Biblio**.

Know how to maximize maintenance spending. This July 2009 *Power Engineering* article is available [online](#).

Deaerator degradation: Managing remaining life and component replacement.
This Sep 2008 *Power* article is available [online](#).

Reports

Electricity Industry Profile: Global. Datamonitor report. Oct 2009 (44 pages)
Market Overview; Market Value; Market Volume; Market Segmentation; Market Share; Five Forces Analysis; Leading Companies (Electricité de France (EDF), E.ON AG, RWE, Tokyo Electric Power Company); Market Forecasts.
(To request: email library@energylibrary.org.nz Ref: **1009-Report1**)

Electricity Industry Profile: Australia. Datamonitor report. Oct 2009 (37 pages)
Market Overview; Market Value; Market Volume; Market Segmentation; Market Share; Five Forces Analysis; Leading Companies (Energy Australia, Energex Ltd, Origin Energy Australia, AGL Energy (AGL)); Market Forecasts; Macroeconomic Indicators.
(To request: email library@energylibrary.org.nz Ref: **1009-Report2**)

Electricity Industry Profile: Asia-Pacific. Datamonitor report. Oct 2009 (31 pages)
Market Overview; Market Value; Market Volume; Market Segmentation; Market Share; Five Forces Analysis; Leading Companies (Tokyo Electric Power Company, Huadian Power International Corporation Ltd, China Power Investment Corporation (CPI), Taiwan Power Company (Taipower)); Market Forecasts. Note: for the purposes of this report Asia-Pacific comprises Australia, China, Japan, India, Singapore, South Korea and Taiwan.
(To request: email library@energylibrary.org.nz Ref: **1009-Report3**)

Energy on the Web

New Zealand

Transpower's first public meeting was held last week – the video is [online](#).

New Zealand's energy outlook - 2009 Edition - Published 29 Sept. See the MED [website](#).

Submissions to Electricity Market Review – These can be viewed on the MED [website](#).

Stockton revisited: The mine and regulatory minefield – Oct 2009 PCE [report](#).

The TrustPower Wairau River Hydro Power Proposal: A review of the processing of the resource consent applications – Oct 2009 [report](#) commissioned by MfE.

Security of supply outage plan (SOSOP) – Oct 2009 Electricity Commission [document](#).

Consultation on managing locational price risk: Options – Electricity Commission consultation [paper](#) (submissions due by 5pm on 7 Dec).

Consultation on transmission pricing review: High-level options - Electricity Commission consultation [paper](#) (submissions due by 5pm on 7 Dec).



Employment expectations / HR insights – The Hudson [Report](#) analyses the October - December 2009 quarter.

Contact Energy – [Annual report](#) 2009

Genesis Energy – [Annual report](#) 2009

Mighty River Power – [Annual report](#) 2009

Transpower – [Annual report](#) 2009

Meridian – [Annual report](#) 2009.



International

How the energy sector can deliver on a climate agreement in Copenhagen - special early [excerpt](#) of the IEA's World Energy Outlook 2009.

Geothermal Engineering plans commercial scale geothermal power plan in UK – 13th Oct [news](#).

Geothermal heat pump manufacturing activities 2008 – Oct 2009 DOE/EIA [report](#).

Tracking the sun II: The installed cost of photovoltaics in the U.S. from 1998-2008 – Oct 2009 Berkeley Lab [report](#).

Tackling climate change nets 4.5 million jobs – Oct 2009 American Solar Energy Society (ASES) [report](#).

Estimating U.S. Government subsidies to energy sources: 2002-2008 - Sept 2009 Environmental Law Institute [report](#).

Review into the role of hedging contracts in the existing NEM prudential framework – Oct 2009 PricewaterhouseCooper's draft risk assessment [report](#).

Distributed energy and its stakeholders: making sense of the distributed energy landscape in Australia - Aug 2009 CSIRO [report](#).

Final winter consultation report 2009/10 - Oct 2009 National Grid [report](#).

Geoengineering the climate: Science, governance and uncertainty - Sep 2009 Royal Society of London [report](#). You can read the RSNZ response to the report [here](#).

Unfinished business: The missing elements of a sustainable energy and climate policy - Oct 2009 Business Roundtable [report](#).

The economics of 350: The benefits and costs of climate stabilization - Oct 2009 Economics for Equity and the Environment Network [report](#).

Green power marketing in the United States: A status report (2008 Data) – Sept 2009 NREL [report](#).

The present and future of grid-connected energy storage - *Transmission & Distribution World* [webcast](#).

Project Discovery - Energy market scenarios – Oct 2009 Ofgem [consultation document](#).

The Big Business Refit – a Carbon Trust scrappage/loan [scheme](#) launched recently in the UK.

The Clean Energy Innovation Centre – Australian Government [website](#).

Powering ahead: Delivering low carbon energy for London - October 2009 LDA, London First and London Councils [report](#).

The global oil depletion report – Aug 2009 UKERC [report](#).

Heads in the sand: Governments ignore the oil supply crunch and threaten the climate - Oct 2009 Global Witness [report](#).

Smart grid, smart city: A new direction for a new energy era - Australian Government pre-deployment 2009 [report](#).

Ofgem's response to the Government's renewable financial incentives consultation – Oct 2009 Ofgem consultation response [document](#).

Ofgem Consumer First panel – Oct 2009 research [report](#) from the third event (which explored consumer involvement in Price Controls and how tariff structures could affect energy efficiency behaviour)

RPI-X@20, Technological change in electricity and gas networks - Oct 2009 KEMA [report](#) commissioned by Ofgem looking at the potential for technological innovation on the GB energy networks.

Carbon management and offsetting survey 2009 - [results](#).

Fuel for Thought

Who has seen the wind?

This year the Canadian Wind Energy Association partnered with Canadian Geographic on a photo competition that challenged entrants to visually capture the wind. You can see the winning photos [here](#).



To be in to win this month's block of Energy chocolate prize just [tell us](#) which of the winning wind energy photos mentioned above is your favourite. Draw closes 4pm Fri 20th Nov.

Congratulations to Michael, who won the September competition. He told us he deserved the the chocolate because his yellow squeezey stress ball that sits on his desk isn't edible.

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