NAVIgATIng ThE PoWER TRANSITION
CALL FOR PAPERS

SUBMIT A PAPER FOR POWER-GEN Europe 2014
Deadline 20 September 2013
Submit your abstract for Europe’s largest power industry conference

The Advisory Board of POWER-GEN Europe, the region’s largest international event dedicated to electric power generation, is now accepting abstracts for the 2014 conference to be held in Cologne in Germany on 3 – 5 June 2014.

POWER-GEN Europe’s insightful and thought-provoking multiple track conference sessions cover strategic and technical topics chosen and presented by leading practitioners from the power industry itself.

The theme for the 2014 event is Navigating the Power Transition.

Achieving the balance between affordable, clean and reliable electricity has been the defining challenge of the power industry, since its inception. The European Union’s transition to a low carbon future - in particular Germany’s much debated “Energiewende” - has placed this delicate balancing act right at the heart of business and political discussion and become the topic for today’s energy experts.

You are invited to submit an abstract and share your knowledge, experience and ideas with technical and strategic decision-makers and strategists.

A full listing of suggested conference themes and topics are enclosed in this Call for Papers. Abstracts related to the integration of renewable energy into the power system are of particular interest.

As a speaker at this prestigious conference you will gain a heightened professional profile and recognition from colleagues worldwide as you share your knowledge, ideas and industry insights. Furthermore, you will have the perfect opportunity to represent your company and network with leading organizations and high-level influencers.

To submit your abstract please see Abstract Submittal Procedure

Abstract submission deadline:
FRIDAY 20 SEPTEMBER 2013
BEST PAPER AWARDS

Conference speakers will be expected to deliver a written paper and will be then eligible for a coveted Best Paper Award. The Best Paper Awards are presented for both the POWER-GEN Europe conference, as well Renewable Energy World Europe. Judges from the expert conference programme Advisory Boards from both events will choose a Best Paper Award winner from each of the conference tracks with the judging criteria based on outstanding concept and content. There will also be two highly commended papers in each category. With well over 600 authors expected to submit abstracts for the Cologne conferences, these winners will be rightly recognized by the industry as being the ‘best of the best’.  

ADVISORY BOARD
POWER-GEN Europe’s independent expert Advisory Board is responsible for setting the conference themes and suggested topics, for selecting papers to be included in the programme. The Board represents a wide cross section of the industry, and currently comprise s90 experienced professionals from leading European utility companies, equipment suppliers, manufacturers, service providers, associations and consultancies.

At its preliminary meeting, the board decided to make the 2014 conference more focused on high quality non-commercial presentations from recognised experts offering insights, thought leadership and genuine innovation.

WHO WILL BE YOUR AUDIENCE?
Qualified senior management/executive decision makers who have the authority to purchase, or influence the purchase of world-class products and services including:

- Public and municipal utility owners & managers
- Government and regulatory executives
- Independent power producers
- Original equipment manufacturers
- Power / heat plant owners & operators
- Plant service sector
- Project developers & managers
- Fuel suppliers
- Design/structural/construction engineers
- Industrial facilities personnel
- Mechanical/electrical/plant engineers
- Strategic and portfolio investors
- Industry consultants and advisers
- Energy traders
- Trade press
With 80.2 million inhabitants measured in May 2011, Germany is Europe's most industrialized and populous country.

Total electricity production in Germany in 2011 was 612 TWh, while total consumption stood at 607 TWh.

The German electricity market has four major companies, RWE, e.on, Vattenfall Europe and Energie Baden Wurttemberg (enBW), as well as 60 regional and around 800 local or municipal providers.

Germany has considerable reserves of hard coal (2,500 million tonnes) and lignite (40,500 million tonnes).

Germany plans to close its hard coal mines by 2018 to support its goal of reducing use of the fuel for electricity generation.

Germany's nuclear power plants, which supplied 17.8% of the country's electricity in 2011, will all be closed by 2022.

Germany's energy transition envisages that 80% of the country's electricity will be supplied by renewable sources by 2050.

Electricity generated from wind, biomass, hydropower, solar and geothermal energy provided 25.0% of German consumption in the first half of 2012.

Wind turbines with a total capacity of 31,308 MW were installed in Germany by the end of 2012.

Across Germany, co-operatives, farmers and homeowners are part of the 1.3 million renewable energy producers taking advantage of feed-in tariff schemes.
Over 19% of attendees came from Germany
ABSTRACT SUBMITTAL PROCEDURE

All abstracts must be submitted in English, using the on-line form found on the POWER-GEN Europe web site: www.powergeneurope.com or Renewable Energy World Europe web site: www.renewableenergyworld-europe.com

The main body of your abstract must be between 150 and 300 words. Commercial abstracts will be rejected by the conference Advisory Board. The emphasis must be on practical innovation and learning as the Advisory Board is minded to present a smaller number of papers, in order to maintain quality and stature of speakers. Customer and joint customer/supplier papers are particularly welcome.

For full guidelines and requirements, please visit the POWER-GEN Europe & Renewable Energy World Europe website under the Conference section.

PLEASE NOTE:
In submitting an abstract you are indicating your availability and willingness to develop and write a full paper, attend and present your paper at POWER–GEN Europe & Renewable Energy World Europe 2014 and comply with all the deadlines for the provision of your paper and PowerPoint presentation. You will be asked to complete a speaker agreement concerning the publication of your paper and PowerPoint.

Please ensure that the speaker and author details you are providing when submitting your abstract are accurate, as these will be used for pre-event marketing purposes.

SPEAKERS ARE RESPONSIBLE FOR THEIR OWN TRAVEL AND ACCOMMODATION COSTS.

ABSTRACT SUBMITTAL REQUIREMENTS AND GUIDELINES

Authors who submit a paper/panel proposal for possible inclusion in the POWER-GEN Europe & Renewable Energy World Europe 2014 Conference Programme must meet certain obligations and adhere to requirements. Submittal rules/styles apply.

Please pay close attention to the following requirements:

1. Designate a Primary Contact responsible for meeting all deadlines and obligations and provide his/her name, company, address, phone/fax numbers and e-mail address.

2. Designate the actual speaker/presenter of the paper.

3. Provide names, companies, addresses, phone/fax number and e-mail address for ALL authors, co-authors and speakers.

All Primary Contacts will be notified in writing whether or not the abstract was accepted by end of November 2013 at the latest.
STEP-BY-STEP INSTRUCTIONS:

Go to www.powergeneurope.com or www.renewableenergyworld-europe.com

- Click the Conference tab
- Click "Submit Abstract" in the left navigation bar
- If this is your first visit to the new website you will be asked to set up a log-in account. If you have previously submitted an abstract for a PennWell event, you may already be registered in the system
- Once you log in, you can begin entering your abstract, speaker and author details, and may leave the site and return as many times as you would like until Friday 20 September 2013 to modify your abstract or change speaker/author(s) details
- Your abstract will not be submitted until you have completed all the required fields and clicked "Submit Abstract" at the end of the form (3rd tab). You will then see a confirmation page on your screen. You will also receive an e-mail confirming your submittal.
- You can make amendments to a submitted abstract until Friday 20 September 2013. Just click on "Modify Abstract" in the left navigation bar. If you make amendments to an abstract previously submitted, you will need to press "Submit Abstract" again on the 3rd tab of the form.
- After Friday 20 September 2013, no further revisions can be made and abstracts will be submitted to the Advisory Board for review.

Further instructions are available on www.powergeneurope.com or www.renewableenergyworld-europe.com under "Submission Instructions", in the conference tab or contact:

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THEMES & TOPICS

THEME 1 - STRATEGY FOR A CHANGING POWER SECTOR

Papers are invited from interested parties who can address strategic questions in relation to European power business across conventional, nuclear and renewable generation as well as strategies for their integration, including operational strategies.

1 - MARKET ISSUES
- The impact of EU or national policy
- Capacity markets
- Climate policy drivers
- Market design of the future
- Boundaries for political choices
- Customer perception of power sector
- Drivers for utilities strategy
- Grid stability & management
- Securing reliable power supply in Europe
- EU – ETS, carbon tax
- Energy Market Future: Liberal Markets or Central Planning
- Affordability of low carbon future
- Implications of fuel availability & pricing
- Comparing different global energy markets
- Smart City & Urban renewables
- Municipal energy strategies

1 - EUROPEAN APPROACHES
- Energiewende
- Central & Eastern Europe generation profiles
- Western Europe generation profiles
- Southern Europe generation profiles
- Energy Independence
- Project Implementation
- Local Regional Power Strategy

1 - RENEWABLE GENERATION
- Low renewable penetration
- Medium renewable penetration - the bridging strategy
- 100% renewable scenario
- Island scenarios

1 - NUCLEAR POWER GENERATION
- Role in the market
- Regulation and market design
- Public acceptance

1 - PROJECT ISSUES
- Best practices in project development & planning
- Finance & investment
- Risk management
- Attracting the workforce of the future
- Community buy-in & acceptance
- Procurement & contracting

1 - INTEGRATION STRATEGY
- Security of electricity supply
- Grid connection codes
- EU Grid interconnection & supergrid
- Utility generation mix strategies
- Flexible power generation strategies
- Back-up power
- Smart grid
- Life after Feed-In tariffs
- MegaWatts v NegaWatts (Energy Efficiency v Capacity)
- Planning for emergency/black start
- Pricing energy security

1 - STRATEGIES FOR PLANT OPTIMIZATION, O & M & REFURBISHMENT
- Focus: Survival in Harsh Market Conditions
- Cost reduction
- Extended service intervals
- Improving flexibility
- Assuring availability
- Remote control & optimization
- Predictive maintenance
- Decommissioning
- Renewable Energy Plants – Can We Learn From Traditional Plants?
- Repowering
THEME 2 – LOW to ZERO CO₂ EMISSIONS

The conference Advisory Board requests papers on the latest and viable technological options available to achieve the combination of flexible renewable power system solutions with low to zero high capacity power plants serving as base load solution.

2 – LOW TO ZERO CO₂ TECHNOLOGIES
Combined heat & power (CHP)
CHP & biomass
Bioenergy (Solids, liquids, gas)
Carbon Capture & Storage (CCS)
Nuclear new build, PLiM and Plex
Nuclear decommissioning

2 – LOW TO ZERO CO₂ STRATEGIES
Business models for large capacity base load
Barriers and regulatory aspects
Captured carbon usage e.g. EOR
European strategies for emissions reduction
Encouraging low carbon technology deployment
Life after the LCPD

THEME 3 – GAS FIRED GENERATION

The role of gas fired power generation is changing in the European energy mix and in the merit order. Papers are invited that stimulate thought about how technology is being adapted to this new environment.

3 – OPERATOR’S PERSPECTIVE
The experience of plant operator/owner
Influencing the position of gas generation

3 – OPERATING IN A CHANGING EUROPEAN POWER MARKET
Smart grid requirements
Smart power requirements
Balance with the renewable business
Seasonal flexibility across Europe
Contractual requirements to operate gas plants
Reserves in operation e.g. capacity, spinning / non-spinning reserves

3 – MANAGING GAS FIRED TECHNOLOGY
Flexibility
Portfolio optimisation with gas fired generation
Fuel quality
Load management for gas fired technology
Combustion & renewable fuels (off-gas); hydrogen; syngas (IGCC)

3 – ASSET MANAGEMENT
Operation in a capacity market
Ageing plant and residual life assessment
CHP/COGEN
HRSGs
Passivation & re-commissioning
Balance of plant
Service contracts
Retrofits and upgrades
The position of steam plant is also changing with flexibility now increasingly required. Meanwhile, advances in efficiency are continuing as is the trend to use a wider source of combustion materials.

### 4 - LATEST EXPERIENCE IN LARGE USC PROJECTS
- Notable case studies
- Operating experiences

### 4 - ADVANCED STEAM TURBINES
- New design of turbine components
- Efficiency improvements
- Operational flexibility

### 4 - COMBUSTION TECHNOLOGIES
- Firing & boiler technologies e.g. CFB & PC
- Gasification
- Co-firing
- RDF – combustion
- Fuel management
- Combustion optimisation

### 4 - ENVIRONMENTAL SYSTEMS
- Flue gas cleaning
- Wastewater treatment
- Heavy metal capture
- Ash handling
- Cooling water intake

### 4 - NEW PLANT AUXILIARY TECHNOLOGIES
- Feed water pumps
- Feed water handling
- Fans
- Coal mills

### 4 - MODERNISATION
- Plant refurbishment
- Life extension
- Retrofits and upgrades
THEME 5 - AUTOMATION, MONITORING, OPTIMISATION & ELECTRICAL

Papers on all aspect of leading edge plant monitoring, diagnostics, optimization and electrical systems are invited, with particular value placed on case studies and project experiences.

5 - AUTOMATION SOLUTIONS
Cyber & IT security
Challenges from European grid code
Safety & protection systems
Challenges in remote control and operations
Control system applications
Online diagnostics
Life cycle management

5 - ELECTRICAL SYSTEMS & MACHINES
Challenges of new grid code on grid connection & generator
Operating experience with current generator designs
Improvements in generator design
Electrical conversion & storage systems
System integration of conventional & renewable power
Voltage & reactive power
Life cycle management
Grid stability & security of supply

5 - MONITORING & OPTIMIZATION SYSTEMS
Emission control
Flexibility improvements
Efficiency improvements
Condition & plant monitoring
Combustion monitoring & optimization
Equipment service life monitoring

5 - SIMULATION & ENGINEERING TOOLS
Simulators
Offline optimization
Tuning tools
Data mining

Commercial presentations and advertisements will not be selected.
THEMES & TOPICS

THEME A - INTEGRATION TECHNOLOGY

The power industry must plan for the future by changing its overall strategy to account for the new generation mix. Papers are invited that address this challenge and which explain how technologies can be used to ensure grid stability.

A - NEW POWER PRODUCTS
Ancillary services, reactive power supply
Dispatchability, on/off
Frequency control
Virtual Power Plants - VPP
Big data, customer profiling

A - TRANSMISSION & DISTRIBUTION
Grid design
Power management
Balancing services
Standards and best practice

A - ENERGY STORAGE
Chemical energy storage
Hydro & pressure systems
Cryogenic
Power 2 Gas
Impact of storage on grid operations

A - RESEARCH & DEVELOPMENT
Modelling
Demand side management
Forecasting
Promoting R & D

THEME B - RENEWABLE ENERGY TECHNOLOGY

Papers presenting practical knowledge and experiences across all aspects of commercialized renewable power are invited. Operating experiences and maintenance presentations will be welcome.

B - TECHNOLOGY ADVANCEMENTS
Onshore wind
Offshore wind
Solar CSP
Solar PV
Solar thermal
Bioenergy
Geothermal
Heat pumps
Integrated plants
Hydropower
Wave energy
Tidal power

B - RENEWABLE GENERATION CASE STUDIES
Operating experiences
Maintenance issues
Plant optimization

B - HYBRID POWER PLANTS
New designs
Case studies

B - OFF-GRID
Distributed small scale renewables
Micro generation
Isolated grid integration


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<tr>
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To find out how your business can benefit from participating at POWER-GEN Europe 2014 please complete this form and fax it to: +44 (0)1992 656 700

Name: ____________________________________________
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I would like more information:
☐ Exhibiting at POWER-GEN Europe 2014
☐ Attending the POWER-GEN Europe 2014 conference
☐ Visiting the exhibition POWER-GEN Europe 2014
☐ Sponsorship opportunities at POWER-GEN Europe 2014
☐Submitting an abstract for the POWER-GEN Europe 2014 conference
☐ Advertising in POWER-GEN Europe’s official magazine Power Engineering International (PEi), and other official publications linked with the event.

POWER-GEN Europe is a PennWell Corporation event, please tick if you do not wish to receive information about:

☐ Future POWER-GEN Europe events
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