



NEWSLETTER

Issue 1 2006

This newsletter aims at keeping members up to date with a range of news, policies, funding and research opportunities, forthcoming events, career and recruitment news, and trade leads in all areas of the UK hydropower industry.

◇ <u>CONTENTS:</u>	Page
• New BHA Chief Executive Officer	1
• HIDROENERGIA 2006	2
• The Energy Review	2
• Plans For New Hydro in Ludlow	3
• Work on Glendoe Starts	3
• Energy Research Partnership Launched	3
• River Basin Planning for Scotland	3
• Zonal Transmission Losses	4
• Favourable Forecast for Renewables	4
• Energy High on EU Agenda	4
• EU Directives on Renewable Energy and White Certificates	5
• Security of Supply & Impacts of Storms on Grids	5
• Response to Commission on Renewable Energy Supply	5
• Methane From Living Vegetation Too!	6
• CAMS Update	6
◇ EXPOSure – Hydro news from around the globe	
• Notification of Two Important Events	6
• Letters of Credit and Export Documentation Made Easy	7
• India's Power Ministry Pushes for Hydro	7
• Indian Watermills Go Hydroelectric	7
• Bush Cuts Turbine Programme from US Budget	7
• East Africa Facing Power Shortages	7
• Hydro Generation Increases in The Ukraine	8
◇ Current Consultations	8
◇ Member Discounts	8
◇ Welcome to New members	9
◇ Careers	9
◇ Trade Leads	9
◇ Forthcoming Events	10

NEW BHA CHIEF EXECUTIVE OFFICER



David Williams, BHA's new CEO

On 1st January 2006, after being elected late last year, David Williams was appointed as the BHA's new Chief Executive Officer, taking over from Kieron

Hanson, who stepped down from the role after more than three years.

David, who until last August spent 5 years working very closely with the BHA as the UK Trade & Investment's Hydropower Export Promoter, has been an active member of the BHA Council for a total of 10 years. He was also appointed in 2004 as a Visiting Professor at the University of Edinburgh, where he runs a course for groups of MSc students on developing small hydropower projects. David has many years commercial experience in the hydro industry - from 1964 to 1995, he served in roles of increasing responsibility for Gilbert Gilkes & Gordon Ltd, ultimately overseeing Sales & Marketing for the worldwide small hydropower market. During this time

he established a regional office in Kuala Lumpur, Malaysia, covering South and South East Asia.

On accepting this new role, David says:

"I am pleased to be appointed the new Chief Executive of the BHA. My thanks go to the Council for their support and trust, and to Kieron Hanson (previous CEO) and Steve Cryer (previous Chairman) for their unstinting efforts and foresight, which has brought the Association to the strong position it is in today. I am joined by Ellan Parry in her role as Operations & Marketing Manager as the second full-time employee of the BHA, and, with the help of the new Chairman and Vice-Chairman (Nick Pike and Andy Bilcliff), Adrian Abbott as our Policy & Consultations Manager, the Council and, most important of all, you, the members, we hope to take the Association to new levels of achievement.

It is certainly a time of change and growth for the hydropower industry and we have some interesting and challenging work ahead of us:-

- Continuing dialogue and involvement with the implementation of the Water Framework Directive.
- Ensuring hydropower development, in all its forms, is considered and supported by the Government's Energy Review.
- Implementing a programme of meetings, seminars, workshops and conferences around the UK based on current issues, providing a forums for discussion and great networking opportunities.
- Supporting the industry's export drive by co-ordinating UK hydro participation in conferences, exhibitions and seminars worldwide (maintaining our position as an Accredited Trade Organisation) and continuing our work with UK Trade & Investment and the overseas Posts at British Embassies.
- Developing more and deeper relationships with Ministers and government departments, taking advantage of relevant support mechanisms in order to maintain and improve the status of hydropower as a major renewable energy source.
- Organising and managing Hidroenergia 2006 at Crieff, Scotland in June.

Hidroenergia 2006 will provide the BHA and its members with the best opportunity we have ever had to promote the Association and the UK hydropower industry. This is a European biennial event held under the auspices of the European Small Hydropower Association (ESHA) and, as the organisers, we want to make this a showcase for the strengths and expertise we have here in the UK sector. You will receive many reminders of the event, together with details of guest speakers, the conference programme, exhibitors and sponsors. Hidroenergia 2006 is going to be impressive and we want you to join us as representatives of the BHA!

The BHA is here to serve its members and it is vitally important we do this to the best of our ability. I need to get to know your views and concerns on what is important to you. Only then can I try to help and fulfil my responsibilities. So please keep in touch!"



HIDROENERGIA 2006 New Opportunities, New Solutions, New Image

Things are well under way now regarding the organisation of Hidroenergia 06 and we have recently released the Second Announcement, which includes details of sponsorship and exhibiting opportunities and registration details. For more details and to download a copy of these, please visit our website (www.british-hydro.org).

We have received an extraordinary amount of abstracts from all corners of the globe and covering a multitude of hydro-related topics. These are currently being considered by the Scientific Committee.

For those of you interested in attending, spaces are limited, so please book early to avoid disappointment.

THE ENERGY REVIEW

Our Energy Challenge: securing clean, affordable energy for the long-term

On 23rd January the Government published its consultation document seeking views on the medium and long-term energy policy issues. In the Energy White Paper 2003, 'Our Energy Future - Creating a Low Carbon Economy', the government set out its goals and long-term framework for energy policy. The Energy Review will assess progress against these goals and the options for further steps to achieve them. The Review has a broad scope and will consider aspects of both energy supply and demand focussing on policy measures for the medium and long term. The key issues are summarised as:

1. What more could the Government do on the demand or supply side for energy to ensure that the UK's long-term goal of reducing carbon emissions is met?
2. With the UK becoming a net energy importer and with big investments to be made over the next twenty years in generating capacity and networks, what further steps, if any, should the Government take to develop the market framework for delivering reliable energy supplies? In particular, the Government invites views on the implications of increased dependence on gas imports.
3. The Energy White Paper left open the option of nuclear new build. Are there particular considerations that should apply to nuclear as the Government re-examines the issues bearing on new build, including long-term liabilities and waste management? If so, what are these, and how should the Government address them?
4. Are there particular considerations that should apply to carbon abatement and other low-carbon technologies?
5. What further steps should be taken towards meeting the Government's goals for ensuring that every home is adequately and affordably heated?

Comments are also invited on the following issues:

- The long term potential of energy efficiency measures in the transport, residential, business and public sectors, and how best to achieve that potential.
- Implications in the medium and long term for the transmission and distribution networks of significant new build in gas and electricity generation infrastructure.
- Opportunities for more joint working with other countries on the UK's energy policy goals.
- Potential measures to help bring forward technologies to replace fossil fuels in transport and heat generation.

The consultation document addresses energy policy for the UK as a whole. However, significant aspects of energy policy are the responsibility of the Devolved Administrations in Scotland and Wales. The Review team shall be discussing with the Devolved Administrations, the Secretary of State for Northern Ireland and the Department for Enterprise, Trade and Investment in Northern Ireland, the energy challenges that are faced and their role in addressing them. They shall also be consulting regional interests in England will be discussed.

Copies of the consultation document can be downloaded from the Department of Trade & Industry website: www.dti.gov.uk/energy/review.

It is important that hydropower, including the case for pumped storage, is properly taken into account in the Review. The BHA will prepare a response to the Consultation Document. Please let us have your views or comments by **24th February 2006**.

Adrian Abbott, Policy & Consultations Manager

Plans For New Hydro in Ludlow

A new power plant could be built on the fast-flowing River Teme in Ludlow. Electricity created by the hydropower plant could be used to power community town centre needs and Ludlow Town Council is planning the feasibility of the idea.

Simon Warrilow, an expert on renewable energy sources and a Ludlow resident, believes there is high potential for taking power from the river. The scheme would involve sinking a pipe into the bed of the river so that water could spin turbines and generate electricity. Mr Warrilow will now conduct further investigations with hydropower companies and gather data about the flow of the river.

Work on Glendoe Starts

Work has started on the £100m Glendoe power station. SSE has subcontracted Hochtief (Germany) awaits Highland Council's planning permission to create a temporary workers' camp. Forestry clearance is underway ahead of construction. camp at the south end of Loch Ness for up to 300 workers who are still to be recruited for the scheme. The next stage will be the construction of two roads within the site. The camp will be self sufficient with its own water supply, sewage treatment plant, laundry and recreation facilities. A round-the-clock shuttle service will operate between the camp and nearby Fort Augustus to avoid excessive use of vehicles during the construction work. A major recruitment exercise is imminent and SSE chiefs

yesterday promised that local contractors would be favoured.

Glendoe will involve the construction of a 35metre-high, 1km-long dam at the head of Glen Tarff, in the Monadhliath mountains, forming a 1km-long reservoir or loch. It will connect to a power station in a cavern deep inside Borlum Hill, on the south shore of the Ness. The scheme will also use a series of steel-lined tunnels, 300 metres underground to collect rainfall from the surrounding area and direct it to the power station. Its 100MW capacity should provide enough electricity to power at least 37,000 homes. Construction is expected to take two years.

Energy Research Partnership Launched

Top Energy Industry Executives, Whitehall officials and senior academics are being brought together in the Energy Research Partnership (ERP), an initiative promoted by HM Treasury designed to give strategic direction to UK energy research, development, demonstration and deployment, aiming to increase the level and impact of national R&D activity.

The ERP will initially focus on:

- Identifying approaches and technologies to accelerate carbon reduction and maintain security of supply at an affordable price, and establishing strategic objectives and priorities for energy research in the UK to help to bring these to a commercial reality;
- Achieving a step change in the rate of energy innovation in the UK by considering how the UK supports energy R&D and the options for enhancing coherency, effectiveness and value of future programmes;
- Addressing skill shortages in the energy sector and communicating the exciting and challenging opportunities that the energy sector offers.

River Basin Planning for Scotland

The Scottish Environment Protection Agency (SEPA) has published *River Basin Planning for the Scotland River Basin District* its strategy for developing the first river basin management plan (RBMP). The publication outlines the development of the strategy to implement the Water Framework Directive, the administrative structures and arrangements including measures for the co-ordination and co-operation between river basin planning and other planning processes, principals for encouraging participation and involvement.

It sets out a table of actions and SEPA intends to develop a monitoring system to measure:

- achievement of the objectives
- delivery and effectiveness of RBMP actions
- awareness of water issues and potential involvement
- level of active involvement in the RBMP process
- level of integration and co-ordination with other plans and planning
- level of consensus achieved by the national and area advisory groups.

The strategy is available from SEPA's website www.sepa.org.uk/wfd/rbmp or can be ordered by e-mail (publications@sepa.org.uk) or tel: (01786 457700).

Adrian Abbott, Policy & Consultations Manager

Zonal Transmission Losses

Members are probably aware of the concept of locational transmission charges where generators in Scotland and northern England pay high use of system charges and generators in southern England receive negative transmission charges. There is a proposal now to introduce zonal transmission loss charges.

The proposed modification is essentially the same as an earlier BSC modification proposal that was approved but not implemented after a judicial review. The way the process would work is that the energy volumes of BSC parties would be scaled by a loss factor. If the loss factor in Scotland was (say) 20% then a generator contracting to sell 80MW would need to produce 100MW. This would essentially reduce the income per MWh generated by 20%. For embedded generators in Scotland (non BSC parties) the effect would be similar. Since a supplier in a zone with a loss factor of -20% would only have to pay for 80MW out of each 100MW actually consumed, the amount he would be willing to pay embedded generators would also be reduced by around 20%. The opposite mechanism would apply in Southern England where generators would be credited with more generation than actually produced and Suppliers charged for more demand than actually consumed. The changes would probably not affect ROC income, which is based on metered data although that could also change in future if a losses scheme was implemented. For companies with national portfolios of generation and/or supply, the impact of zonal losses may be relatively small. This proposal would impact most on suppliers with most of their demand in Southern England and on independent generators in Northern England and Scotland.

The modification proposal is available at <http://www.elexon.co.uk/documents/modifications/198/P198.pdf> and Elexon's Initial Written Assessment for discussion at the BSC panel is available at [http://www.elexon.co.uk/documents/BSC Panel and Panel Committees/BSC Panel Meetings 2005 - 105 - Papers/105_005.pdf](http://www.elexon.co.uk/documents/BSC_Panel_and_Panel_Committees/BSC_Panel_Meetings_2005_-_105_-_Papers/105_005.pdf) (this IWA includes a copy of the proposal).

The proposal has been raised by RWE Npower as a modification to the Balance & Settlement Code (BSC). It was discussed at the BSC panel meeting on 12th January and will probably be sent to a Working Group for a report in 4 to 6 months. Elexon recommended that the working Group commission a cost benefit analysis and also recommend that this should include as a minimum:

- An assessment of the impact of P198 on different classes of Parties (e.g. renewables and small players)
- An assessment of the potential impact of P198 on the costs to Parties of carbons emissions
- An risks which might be associated with a zonal losses scheme.

This proposal will only reduce losses if it encourages more southern generation and less northern generation at times when the network is heavily loaded. This might be seen if (for example) all generation was coal and gas fired. However, if a large proportion of northern generation is "must run" plant - for example, renewables and/or nuclear - the actual reduction in total system losses might be significantly less.

Favourable Forecast for Renewables

The latest European Commission energy forecasts, due out early this year, are likely to show the share of gas in power generation falling to around 25% of the mix by 2030.

New projections based on expectations of slower economic growth and a sharper increase in fuel prices predict the share of gas-fired power generation peaking at circa 30% in 2015, and then falling to just under 25% of the total mix by 2030. The forecast sees renewable sources rising to around 28% by 2030, while solid fuels (coal & lignite) will see their share rise from a low in 2015 to reach a similar level. Projections for nuclear power are unchanged at circa 20%. The projections for new-build see a steep increase in new nuclear capacity after 2025. These projections envisage lower consumption of natural gas and greater use of solid fuels leading to 7% higher emissions of greenhouse gases (GHGs) in 2030 than 2005, although the experts see plant efficiency increasing and CO₂ emissions per kWh decreasing.

The projections were made using the PRIMES model, a partial-equilibrium model of the European Union energy system, containing a detailed electricity module covering thirty-four countries and their interconnection, developed by, and maintained at, the E3M-Laboratory at the National Technical University of Athens. The Commission has used previous results of the PRIMES model to produce energy projections with climate measurements for the *Clean Air for Europe* (CAFE) programme and the EU *thematic strategy on air pollution*. The Electricity Industry has argued through EURELECTRIC that these scenarios have led to unjustifiably high assumptions for future emissions, abatement costs and timescales for attaining reduction targets.

Adrian Abbott, Policy & Consultations Manager

Energy High On EU Agenda

Security of energy supply will be a major theme at the European Summit on 23-24 March, hosted by Wolfgang Schäussel, the Austrian chancellor and the new chair of the EU presidency for the six months to June.

Mr Schäussel called for concerted EU action on energy diversification, development of gas storage, and security of supply. He also promised to revive the debate on the (currently in limbo) European Constitutional Treaty, which, if ratified, would give the EU formal competence to take energy policy measures.

Mr Schäussel said, "long-term solutions are the only possible response" in ensuring security of supply. "We need EU energy security standards, more infrastructure investment, and thorough review of all options", also in view of environmental concerns, he said.

The 2006 Council Programme includes many energy dossiers already in the pipeline, such as;

- the adoption of a Directive on *end-use energy efficiency and energy services*
- guidelines on *trans-European energy networks* and a Regulation on EU funding for network projects
- extensive discussion on secure, competitive and sustainable energy policy for Europe
- an *energy efficiency action plan* to be drawn up on the basis of consultations on the *energy efficiency green paper*

In external relations, the ongoing EU-Russia and EU-OPEC dialogues for security of energy supply, are going to be important. It is thought the EU-Southeast Europe

Agreement, establishing an energy community should be ratified early in the Austrian Presidency.

On renewable energy, the presidency seeks progress on developing a medium/long-term strategy based on the Commission's end-2005 report on RES support schemes and biomass action plan, with an eye also to energy efficiency and climate change action.

A large number of countries have gaps to close between 2003 emissions and those allowed under Kyoto. According to the guidance, if the trading sector carries a proportionate burden to close the gap, the EU-cap would be 6% lower than the allocation in the first phase.

Adrian Abbott, Policy & Consultations Manager

EU Directives on Renewable Energy and 'White' Certificates

As the European Commission finalises a paper on security of supply and wider EU energy policy for discussed at the spring Summit of EU leaders on 23-24 March, France has tabled a note towards a common EU energy policy focussed on gas security; cross-border power trading; the role of nuclear power; and use of white certificates to promote energy savings.

The paper emphasises the role of nuclear power in addressing both security of supply and climate change concerns, and suggests setting up an EU-sponsored education and training programmes under the Euratom Treaty. The paper calls for an EU Directive on "thermal renewable energy" to supplement existing directives on the generation of electricity from renewable energies and biofuels and recommends that a proportion of the structural funds allocated to the EU Member States be reserved to finance "TRES" projects.

To promote energy savings and efficiency, the French paper calls for Member State to set up a "white certificate" system to recognise and put a value on energy savings, with a view to developing a European trading market in these certificates. France's 2005 Energy Law provides for a white certificates system to be set up this year. In the EU, only Italy so far has such a system, although schemes such as the UK's *energy efficiency commitment* could also be transformed into a certificate-based system.

Adrian Abbott, Policy & Consultations Manager

Security of Supply & Impacts of Storms on Grids

A new EURELECTRIC report *Security of Electricity Supply- Roles, Responsibilities & Experiences within the EU* looks at the implementation of the newly-adopted Directive and a second report examines the *Impacts of Severe Storms on Electric Grids* and analyses the political and regulatory consequences of extreme weather events on power grids, mainly distribution networks.

The report on *Security of Electricity Supply* reinforces the EURELECTRIC message that the liberalised market is able to ensure supply security, provided it is allowed to function freely and basic pre-conditions are met. The EURELECTRIC experts point out that where a quick solution is required to meet market problems, the framework laid down in the Electricity Market Directive 2003 provides regulators or governments with emergency measures. EURELECTRIC warns that measures such as capacity tendering should

only be used as a last resort. The experts also looked at the new *Directive on Security of Supply* and found that it reinforces elements that are vital for the sound development of a fully-liberalised single European market without seriously interfering with the market established by the Electricity Market Directive. The report outlines a gradual course of actions to ensure the most market-friendly measures are always used first.

The report on *Impacts of Severe Storms on Electric Grids*, examine four events; freezing rain in Canada in January 1998 that covered everything in up to 90 mm of ice; a windstorm up to 220km/h in France in December 1999; a heavy snowstorm in Poland in November 2004; and storm *Gudrun* with 150 km/h gusts in Sweden & Latvia in January 2005. The regulatory and political reactions to these events differed from case-to-case, but some common patterns can be recognised, such as a demand for burying more distribution networks underground and the introduction of stricter functional demands for distribution networks, accompanied by compensation schemes for customers.

Adrian Abbott, Policy & Consultations Manager

Response to Commission on Renewable Energy Supply

Responding to the EU Commission's *Communication on Electricity from Renewable Energy Sources*, EURELECTRIC argues for a progression towards harmonised RES-support schemes based on tradable certificates, which should be taken up in the Commission's end-2007 review.

The Communication reviewed the support schemes based on feed-in and tradable green certificates (TGCs), concluding that feed-in schemes were more cost-effective at present. EURELECTRIC largely agrees with the Commission's analysis, but pointed out some flaws; for example, the schemes are difficult to compare because there are differences across Member States in the payment of certain ancillary costs, such as transmission lines from RES-sites. The analysis also favours schemes that have been in place for some time, which only applies to feed-in schemes. EURELECTRIC argues that, as tradable green certificate (TGC) schemes become established, competition between producers will develop and costs fall, whereas the market cannot develop in this way under fixed-price, feed-in support schemes. The Commission's intention to hold a further review by the end of 2007, is welcomed as by that time more experience of TGC schemes will have been gained. EURELECTRIC argues strongly for economically-efficient support systems such as Europe-wide TGC schemes, which would further drive down prices, avoiding the risk of over-compensation of feed-in schemes. In line with the principles of the EU internal market and Commission policies on competitiveness, a separate non-integrated renewable-electricity market based on fixed-price national support schemes should be avoided in the long term. EURELECTRIC recognizes the need for a gradual transition from national schemes to a European system so as to avoid stranded investments. Additionally, the paper calls for RES-development policies to be made consistent with environmental legislation, such as the *Water Framework Directive*, which is for example likely to lead to reduction in hydropower plant capacity.

Methane From Living Vegetation Too!

One of the main criticisms of hydropower dams was that they generated methane from the decaying vegetation in the dammed reservoir. However, in a study published in "Nature" on 11th January 2006, the Max Planck Institute for Nuclear Physics reported that living plants might emit almost a third of the methane entering the atmosphere.

In the last 150 years the concentration of methane in the atmosphere has almost tripled, mainly as a consequence of human activity – from rice cultivation and ruminating animals. Previous estimates were that they made up two-thirds of the world's annual 600m tonnes. The Max Planck Institute found that living plants emit methane even in oxygen-rich surroundings – 10-1,000 more than dead plant material - and has estimated that living plants emit 60-240m tonnes of methane a year. It remains mysterious how plants produce methane which is much more dynamic than carbon dioxide and lasts about 10 years in the atmosphere. The rate of methane increase has slowed down in the last 10 years and the report suggests that it tropical deforestation may be a factor and the

research suggests a reason for the plumes of methane observed by satellites over tropical forests.

The findings have implications for the Kyoto Protocol which has sanctioned forestry developments as carbon sinks but industrial carbon emissions are easily measured but the removal of carbon is more difficult to measure. However, it does not mean that planting trees is a bad idea – planting trees where none were before does lock up carbon but this research means that the overall benefit might be reduced.

Adrian Abbott, Policy & Consultations Manager

CAMS Update

Derwent CAMS – The Environment Agency's Statement of Responses says that licences for hydropower production are classed as non-consumptive and therefore the licence holder can be confident of renewal of the licence.

Test & Itchen CAMS – The Environment Agency's Statement of Response does not refer to the BHA response. The final strategy will be published on 31st March 2006.



NOTIFICATION OF TWO IMPORTANT EVENTS!

We are pleased to invite you to take part in two major export events organised by the BHA with support from UK Trade & Investment:

UK Hydropower Stand at "Hydro 2006"

Porto Carras, Greece – 25-28 September 2006

Following on from our successful presence at the last five "Hydro" exhibitions, we have again collaborated with UK Trade and Investment (UKTI) to have a British Hydropower Pavilion at this year's event. Hydro 2006 will be held in Porto Carras, close to Thessaloniki, in Greece, from 25th to 28th September 2006 (inclusive). For more general details of the Conference and Exhibition please visit www.hydropower-dams.com.

This is *the major* hydropower event of the year outside North America and attracts over 750 delegates from 69 countries. The exhibition houses all major

players in the industry worldwide and the conference brings together key industry players at a practical forum to further the development of world hydropower. Excellent networking is possible over the four days of the event. The event should be of interest to all companies within all sectors and size ranges of the UK hydropower industry.

Last year our stand was superbly designed and excellently located and we are maintaining our advantage this year with another six-booth space in an equally attractive position. From the floor plan at the above website, these are booths 49 to 54. Each company will have a dedicated space and panel in which to show their wares, along with space for literature and company logo clearly visible on the main display. Participating companies will be involved in the stand design process and will have an opportunity to discuss any specific requirements nearer the time.

We will be adding value to the UK pavilion in several ways. For example, we will be producing a brochure containing details of all participating companies for distribution at the event, along with our 'UK Hydropower' CD-ROM, both of which were extremely popular last year. We will also be holding another seminar on the stand, followed by a drinks reception, providing invitations to the participating companies for distribution to their targeted delegates. Participating companies will have the opportunity to give a short presentation (this could be a general presentation on their company or perhaps on a new product or service they are offering). Several other options are being considered in order to add value and increase the benefits for companies who wish to join us on the UK Pavilion, more details of which are to follow.

The cost per company will depend on how many companies sign up, so early indications of your interest would be most useful. We will again be attempting to negotiate discounted delegate fees, for both the conference and exhibition, which in the past have provided a considerable saving for those wishing to attend.

Finally, the British Embassy in Athens is keen to help in getting potential customers and partners to the event and are also able to provide some business support services to individual companies. Should you have any specific requirements, please let me know and we will pass your requests onto Athens so that they can get in touch with you to discuss these and advise you of costs.

I hope that we will join us and our regular participants in a happy and successful event. Space on the UK Pavilion is limited and is available on a first come, first served basis so please confirm your interest in exhibiting at Hydro 2006 to us as soon as possible.

UK Hydropower Stand at "Water Resources & Renewable Energy Development in Asia"

Bangkok, Thailand – 30 Nov & 1st Dec 2006

This two-day International Symposium will bring together international experts concerned with the development of dams and renewable energy schemes throughout Asia but with particular emphasis on the Mekong region, where a number of hydropower projects are underway and planned. Collaboration with these countries through power purchase agreements is assisting the development of hydropower projects, for which there is huge potential, both for domestic needs and for export.

The event is being held on 30th November and 1st December at the Montien Riverside Hotel in Bangkok, which offers easy direct access from all parts of the world. For more general details of the Symposium and Exhibition please visit www.hydropower-dams.com.

A technical exhibition will run concurrently with the Symposium and, with support from UKTI and the Department of Trade & Industry (DTI), we have reserved a four-booth stand in a prominent location within the exhibition area in which to represent the UK hydro industry in a UK pavilion. We will be adding value to this stand in a similar way to the above event, Hydro 2006, and this will include a separate seminar run jointly by BHA and DTI in which participating companies can be involved, details of which will be finalised shortly.

We are currently looking for expressions of interest from companies that may like to exhibit with us on the UK pavilion at this event. Again, places are limited and are available on a first come, first served basis so please register your interest with us as soon as possible.

As a UK Trade & Investment SESA accredited Trade Association, we are able to apply for grants to be paid to qualifying participating SMEs for both of these events.

Spaces are available on a first come, first served basis, so please register your interest with us early to avoid disappointment (info@british-hydro.org).

Letters of Credit and Export Documentation Made Easy

Are you struggling with international payment mechanisms such as Letters of Credit? Export-Eze is a new service delivered by Business West, working in conjunction with HSBC and Chambers of Commerce around the UK, providing help and advice on export documentation, Letters of Credit, freight management services and marine insurance services.

For more information on this service, contact Business West on 0845 8381836 or email exportenterprise@businesswest.co.uk.

India's Power Ministry Pushes for Hydro

Speedier implementation of hydro projects is being encouraged by India's Ministry of Power's Consultative Committee after criticism raised about the long time taken from initial project report to implementation and frequent undue delays which has resulted in the country lagging behind in hydropower development. The government is taking several steps towards rectifying this, including attracting private investment and introducing incentives, such as rewards for better availability, generation of secondary energy, ND measures for mitigating hydrological risks during initial operation.

IWPDC

Indian Watermills Go Hydroelectric

Villagers with watermills in Himachal Pradesh, which are traditionally used for irrigation and grinding grain, are being encouraged to adapt their mills to generate electricity as part of a project set up by the state government and the Central Ministry of Non-Conventional Energy Sources. Two mills have already begun generating, producing 5MW and 3MW, with others planned in 85 pilot locations.

IWPDC

Bush Cuts Turbine Programme from US Budget

The US Department of Energy's (DOE) Advanced Hydropower Turbine Systems (AHTS) programme has been dropped from the President's FY'07 budget. The aim of the project, which commenced in 1994, was to create a more efficient and environmentally-friendly turbine that could generate more power from less water.

President Bush is to introduce an Advanced Energy Initiative, which supports technologies such as biofuels, hydrogen, advanced photovoltaics and wind power, but will either cease or significantly reduce RD&D for concentrated solar power, geothermal and hydropower.

This is disappointing news and a complete U-turn from the Senates recommendation 8 years ago that hydropower should receive \$4m for RD&D.

IWPDC

East Africa Facing Power Shortages

Falling water levels caused by delayed rains have resulted in power shortages across East Africa, leaving the regions' hydro plant operators to reduce generation or even shut plants down.

Tanzania has been affected badly as water levels at the Metra dam fell, reducing capacity from 80MW to as little as 34MW and affecting power supplies through Dar es Salaam. Further north in Kenya, the water level at the Masiga dam, which is the main reservoir for seven major hydropower stations contributing more than 50% of Kenyan capacity, was significantly down to just 14m above minimum operational level. And the continued drought in Uganda is expected to result in the Ugandan government shutting down two of its hydro stations in order to maintain the water level of Lake Victoria. This would reduce combined generation to a five-year low of 170MW, which is significantly short of peak demand.

IWPDC

Hydro Generation Increases in The Ukraine

The Fuel & Energy Ministry in Ukraine has reported an increase in hydro generation of 5% in the last year. In 2004, hydropower accounted for 6.5% of electricity production and this increased to 6.7% in 2005.

IWPDC



CURRENT CONSULTATIONS

Full details of the following consultations have been sent to you by separate email. Should you wish to receive these details again, please contact the BHA. Responses to be sent to info:british-hydro.org.

- **Aquaculture & Fisheries Bill** – comments for inclusion in the BHA response to reach us by 22nd February 2006.
- **London CAMS** – comments for inclusion in the BHA response to reach us by 22^d February 2006.
- **Amendments to Business Rate Appeals Regulations** - comments for inclusion in the BHA response to reach us by 28th February 2006.
- **River Basin Planning Guidance to the Environment Agency** - comments for inclusion in the BHA response to reach us by 7th March 2006.
- **Brue, Axe & North Somerset Streams CAMS** – comments for inclusion in the BHA response to reach us by 7th April 2006.
- **Enhancing our Care of Scotland's Landscapes** – comments for inclusion in the BHA response to reach us by 17th April 2006.
- **DEFRA Consultation on Water Company Water Resources Management Plan Regulations** – comments for inclusion in the BHA response to reach us by 20th April 2006.
- **Ebbw & Lwyd CAMS** – comments for inclusion in the BHA response to reach us by 21st April 2006.
- **Thaw & Cadoxton CAMS** – comments for inclusion in the BHA response to reach us by 21st April 2006.



Member Discounts

THE INTERNATIONAL JOURNAL OF
**HYDROPOWER
& DAMS**

Hydropower & Dams subscription are offering a discount on subscriptions to the industry journal International Hydropower & Dams for BHA members. The discounted annual rate is £80 (full price £105) and the discounted 3-year subscription rate is £200 (full price £263). BHA members wishing to take this offer up just need to mark their subscription form "BHA Member" and, once their subscriptions department has confirmed BHA membership with us, they will receive the journal at the discounted rate.

**quoteline
DIRECT**

Quoteline Direct are offering BHA members Gold Club Insurance. The Gold Club scheme is negotiated with over 35 of the UK's largest insurers and offers top quality cover and service with savings of up to 35%. BHA members will get the cheapest quote from over 450 policies on motor, home, travel, van, motorcycle, plus many other optional benefits, such as Vehicle Breakdown Cover, RAC Warranty and lots more.

To obtain a quotation, please call Quoteline Direct on 0870 444 2519, quoting a reference of BRHY, or you can visit our web site on <http://www.quotelinedirect.com/goldclub> and obtain an on-line and interactive quote. Quoteline Direct are part of the Wilsons Insurance Group established in 1969.



WELCOME TO NEW MEMBERS

SmartestEnergy – SmartestEnergy, which has joined the BHA as a sponsoring member, is one of the UK's leading independent energy trading operations. The business was set up in 2001 to give embedded and renewable generators access to the deregulated energy market in the UK. Today, thanks to its highly flexible and cost-effective offer, it has built up a portfolio covering over 15% of the independent generation market and is now the leading independent consolidator in the UK. SmartestEnergy has also developed a wide range of products and services to meet the changing needs of the independent energy sector, including products relating to ROC trading, carbon trading and services aimed at the independent E & P gas sector in the North Sea.



CAREERS

Situations Vacant

Economist – Economist required by Scottish Environmental Protection Agency (SEPA), preferably on secondment until the end of 2006. For more details, visit <http://www.sepa.org.uk/vacancies/index.asp>.



TRADE LEADS

CHINA - Small Hydro (rehabilitation and development)

Consulting Services are required for a renewable energy project designed to enable commercial renewable electricity suppliers to provide energy to customers efficiently, cost-effectively and on a large scale through the construction of a windfarm and the rehabilitation and development of small hydro plants (funded by the World Bank). For more details contact Mr Zhou Fengqi, Renewable Energy Scale-Up Program Project Management Office, B1718 Guohong Manison, Muxidi Beilijia 11, Xicheng Beijing, China. Tel: +86 10 6390 8566, Fax: +86 10 6390 8568, email zhoufq@public3.bta.net.cn.

ETHIOPOA – Project for the Provision of Melka Wakana Hydro Plant

Lot 1: Governor system of the Units with up-to-date compact digital Programmable Logic controller (PLC) controlled governor system and SCADA monitoring system. Transfer control, switching, measuring, signalling & synchronisation facilities of the 230KV & 132/66/15KV switching stations (control rooms) incorporating with the SCADA system to be provided. In so doing the 230KV & 132/66/15KV substations control rooms are to be fully made non-attended. The bidders should interface by supplying Modems that through which the parameters, data and all frequencies to be transmitted to the powerhouse control room by already over stretched 15KV overhead distribution lines supported by steel lattice towers with OPGW Shield Wire with 15 Fibers (optical Fiber Composite Overhead ground wire) clamped at the apex and the OPGW cable is already over stretched to all control rooms and then down to the power house control room. The remote SCADA facility shall contain design, supply with all accessories, erect & interface, test and commission the facility for switching ON/OFF of breakers & disconnects, synchronisation, facilities of the 230KV & 132/66/15KV switch gear devices, measurement and signalling facilities. Transfer control, switching, measuring, signalling facilities of the Dam intake & the Fore bay switching stations (control rooms) incorporating with the SCADA system to be provided, OPGW cable is already over stretched to both control rooms. In so doing the Dam intake & the Fore bay switching stations (control rooms) are also to be fully made non attended. Note: - The Contractor should adapt his PLC with RTU, which is already signed contract for LDC (National load dispatch centre). Replacement of the existing air-conditioning system of the power plant, generator cooling water system with pumps, etc. The bidder should take all specifications & information of the existing system of the equipment being at the site by his own expenses before the award of his offer.

Lot 2: Study & design, supply, erect, test & Commission Generator & Transformer protection system with up-to-date programmable digital static excitation system. The bidder should take all specifications & information of the existing Generator excitation system and protection system beings at the site by his own expenses before the award of his offer. Rectifiers, inverters, station Batteries, etc. Bidders are allowed to bid and submit for both LOTS and/or individual LOTS. Bids submitted for both LOTS are more preferable and bids submitted for individual LOTS will be also considered as responsive tender. For more details, contact Mr Meheret Debebe, The Ethiopian Electric Power Corporation, 2nd Floor, Room No, 207, Addis Ababa, Ethiopia 1233. Tel: +251-156 0027 Fax: +251-155 0822.

INDIA – JV Pre-Qualification

Om Metals Ltd, a hydro mechanical contractors for hydro electric projects in India requires for an upcoming hydro project the association of a company that has experience (pre-qualification criteria) of procurement, fabrication/manufacture. Supply, erection, testing and commissioning of pressure shaft liners (penstocks) having a minimum value of diameter x head of greater than or equal to 1750, i.e. $D \times H \geq 1750$, and a minimum diameter of penstock steel liner of 4.2m, i.e. $D \geq 4.2m$. The total steel tonnage of penstocks done for any project of more than 2500 MT. If you can meet this pre-qualification criteria, please contact Mr Vikas Kothari, Executive Director, Om Metals Ltd, 16/121-122 Faiz Road, Karol Bagh, New Delhi 110005. Tel: +91 11 5154 5590 to 94; Fax: +91 11 2355 5859; Mobile: +91 98110 68101; Email: vikas@omml.net or kotharies@vsnl.com. www.ommetals.com.

INDIA – Consulting Services for the Development of the Rampur Hydro Project

The project is located on the upper reaches of the Sutlej river in the Shimla and Kullu districts of Himachal Pradesh. For more details contact Anil Gupta, Senior Manager, India Rural Development, Satluj Jal Vidyut Nigam Ltd, Himfed Building, New Simla, 171009, India. Tel: +91 77 267 0804, Fax: +91 77 267 0893.

INDIA – Improvement of the Safety and Sustainable Performance of Dams

The World Bank funded Dam Rehabilitation & Improvement project hopes to improve the safety and optimal sustainable performance of existing dams and associated appurtenances. Consultants are required for project preparation. For more details contact Mr S K Das, Ministry of Water Resources, Shram Sakthi Bhavan, Rafi marg, New Delhi, India. Email damsindia2003@yahoo.co.in.

INDIA – Refurbishment of Bhakra Left Bank Power House

Bhakra Beas Management Board is inviting global tenders for the renovation, modernisation and uprating of five hydro generating units at Bhakra Left Bank Power House. Bhakra is situated in Himachal Pradesh about 356km north of Delhi. The powerhouse was originally commissioned in 1960/1 with an installed capacity of 5 x 90MW, this was upgraded in 1981-1985 to 5 x 108MW and the proposed upgrading will take it up to 5 x 126 MW. For more details contact G S Chhabra, Director/P&D(PPs)Dte, BBMB, Plot No. 6-B, Sector 19 B, Madhya Marg, Chandigarh 160019 (fax +91-172-2726421).



FORTHCOMING EVENTS



National Grid – GB Queue User Seminar

22nd March 2006 in London and 23rd March 2006 in Glasgow

Contact: polly.barber2@uk.ngrid.com

Scottish Renewables Annual Conference - *Delivering the New Generation*

Including hydro presentations from the British Hydropower Association

27th – 28th March 2006 – Hilton, Glasgow

www.scottishrenewables.com

Micropower Annual Conference & Dinner

29th March 2006 – DTI Conference Centre, London

Contact Claire Pitt claire@sbgi.org.uk

Seminar on the Business Opportunities in the Power Sector for UK Companies

31st March 2006 – Royal Lancaster Hotel, London

This seminar will highlight where companies have the best opportunities for doing business in the power sector in India and give views on how to approach the market. Topics will include the regulatory regime and advise on the main products and services the Indian players are looking for.

Contact Ivan Youd on 020 7215 8161 or ivan.youd@uktradeinvest.gov.uk



HIDROENERGIA 2006

7th-9th June 2006, Crieff Hydro Hotel, Crieff, Scotland

The biennial international small hydropower conference & exhibition, hosted and organised by the BHA.

For more details, including submitting papers, sponsorship, exhibiting and registration, contact the BHA Secretariat – Tel: +44 (0)1202 886622; Fax: +44 (0)1202 886609; Email: info@british-hydro.org or visit their website www.british-hydro.org.

Sustainable Living Fair & Alternative Energy Symposium

23rd & 24th June 2006 – Summerhill Farm, Hittisleigh, Exeter, EX6 4LP

Contact enquiries@landheritage.org.uk

HydroVision 2006

31st July – 4th August 2006 – Portland, Oregon, USA

www.hcipub.com/hydrovision

Hydro 2006

25th to 28th September 2006 – Porto Carras, Greece

For more details contact the BHA. Tel: 01202 886622; Fax: 01202 886609; Email: info@british-hydro.org

Water Resources & Renewable Energy Development in Asia

30th November to 1st December 2006 – Bangkok, Thailand

For more details contact the BHA. Tel: 01202 886622; Fax: 01202 886609; Email: info@british-hydro.org



Why Not Blow Your Own Trumpet?

The BHA Secretariat is frequently asked to provide articles for trade magazines and other publications. We try to involve members in these where we can but we suspect that there are many good stories that are missed. So don't forget – if you have any interesting stories or success stories to share, please send them to us – with pictures where possible – and we will endeavour to get them published. We can also advertise your job vacancies and future events - info@british-hydro.org

The information contained in this publication is correct to the best of our knowledge. However, we rely on information sources that are outside our control. The BHA is an independent organisation and does not specifically endorse products, services or organisations that are featured or mentioned. The BHA is the trade association representing the interests of all those involved in the UK Hydro Industry. It BHA promotes the industry at home and abroad and aims to increase the awareness of its quality and scope in the wider world.



British Hydropower Association

Unit 12, Riverside Park, Station Road,
Wimborne, Dorset BH21 1QU

T: 01202 886622 F: 01202 886609

info@british-hydro.org www.british-hydro.org