

HISTELEC NEWS

NEWSLETTER OF THE SOUTH WESTERN ELECTRICITY HISTORICAL SOCIETY

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RENEWABLES SUFFER IN BUDGET

George Osborne's recent Budget has removed the Climate Change Levy for renewable electricity, which will be a bitter blow to many renewable projects, not least Drax Power Station which has invested heavily in biomass fuel. The good news of course is electricity bills will be lighter!

NOT SO SMART METERS

A journalist for the Times has had an unfortunate experience with a Smart Meter installation, David Budworth had a smart meter installed by his supplier Ovo Energy. When he started doing some cooking he had a supply disconnection. He is not alone in experiencing problems as many of his readers were quick to respond with adverse comments. When he phoned Ovo, they instructed him to sort out the problem himself by calling an electrician!! According to David, the Government are committed to installing these meters which send accurate readings back to the supplier. Ovo advertise a smart system of energy control together with 100% renewable energy supplied, but how can they guarantee the latter? The major roll-out of these meters commences in April 2016.

FRACKING DIFFICULTIES

After publicly announcing that Fracking would be allowed at a site between Blackpool and Preston, the permission has been withdrawn after many protests. There would have been conditions attached with the local community getting 1% of the returns for community use or to compensate home-owners, but all other sites in Lancashire have been refused. The drilling company Caudrilla were erecting sound barriers costing £1.8 million to muffle the sound of drilling for 24 hours a day for several months. However all is not lost, Yorkshire on the other side of the Pennines have offered a site at Kirby Misperton, enabling drilling into the same seam. All this compared with 18,000 wells hydraulically fractured in the USA last year! Well they have got more room there!!

ARCHIVIST NEEDED

John Gale and Peter Lamb are very keen to get someone-else involved in the Archives as we are struggling to maintain them in an adequate state. Particularly the SWEB Archive needs a complete overhaul and the Main SW Archive needs relabeling. Please will some member step forward to help.

2016 CARDIFF WEEKEND AWAY UPDATE

Plans are well under way for our weekend in Cardiff next April from Friday 22nd to Monday 24th. The Radisson Park Inn Hotel has been booked and the working group visited Cardiff by train in July and luckily just avoided the 1st Great Western train strike! We visited the Cardiff Bay area and work is in hand to get a tour of the Welsh Assembly and a boat trip round Cardiff Bay and up to Bute Park close to Cardiff Castle and the City Centre.

The outline plan for the weekend is:

Friday – meet at the hotel for dinner. We are trying to get an after dinner speaker

Saturday – a day in Cardiff visiting the Bay and city areas taking advantage of the adjacent Park & Ride

Sunday – a day at Fagan's Natural History Museum

Monday – leave the hotel and we will try and get a visit to the WPD Control Centre

This is being planned as a flexible weekend, so if folk want to visit other places in the Cardiff area this will be possible. We will provide information on other places to visit, some of which you may like to do on your way to or from Cardiff. A letter of intent asking for a deposit with more info will be going out in the autumn.

SWANSEA BAY TIDAL LAGOON

It would appear, since construction contractors are being lined up that the go-ahead has been given for this project. At £1 billion project it will be the biggest civil engineering scheme in Britain over the next few years involving a six mile sea wall. It is intended to harness the tide to produce 320 MW of electricity. This is the first of six similar schemes around the Country. However objections have been received from a charity called Citizens Advice, who say it is "appalling value for money" i.e. the subsidies are too high. The same arguments as the Nuclear debate?!!

NEW NUCLEAR "PLAYER"

With all the companies vying to install Britain's next Nuclear Power Stations, you wouldn't have expected another one besides Areva (French), Westinghouse (USA), GE/Hitachi, but there is another, Candu Energy from Canada. With all that enthusiasm one would have thought that it would happen sooner than later, but there is a need for a large capital outlay, which seems to be the biggest hurdle.

A CRUISE THROUGH THE MANCHESTER SHIP CANAL

It must be said that, when Peter Lamb invited members to join him and Valerie on their proposed canal cruise, few thought there would be much interest expressed. However, in the event, 43 members, spouses and friends did just that, assembling at the Premier Inn, Salford Quays on Sunday evening, 19th. April. Nowadays Salford Quays is a pleasant place to visit at any time but, with the superb weather that we enjoyed, it took on the air of a modern, waterside resort and, since our hotel stood on the water's edge alongside a huge dock basin, the scene was set for a warm evening stroll along the quays before dinner.

Monday brought glorious weather once again and our ship, a serving Mersey Ferry, the "Royal Iris" awaited us only a couple of hundred yards from our hotel. We embarked at 0900hrs, and set sail a half an hour later. Since Manchester is about 60 feet above sea level our trip was downhill all the way to Liverpool and so we descended 5 sets of locks during our voyage. There were amazing things to see from the very start with the lifting of one bridge, the swinging of another and passage through a set of locks. There are 21 bridges in total which cross the canal, including swing bridges, lifting bridges, high level bridges and railway viaducts. Perhaps the most memorable was the Barton Swing Aqueduct, which carries the Bridgewater Canal over the Manchester Ship Canal. It is the only opening aqueduct in the world and weighs a total of over 1,400 tons, which includes 800 tons of water. Also we passed two rivers flowing into the Canal, the Mersey and the Weaver involving outflow sluice gates as well.



Chairman David and Secretary Chris with Anne

The canal, which is 36 miles long, took 6 years to build, starting in 1887 and eventually opened in 1894. It is hard to believe today that, of its workforce of 16,000 men, 130 lost their lives in 3000 accidents. Its purpose was to link the port of Liverpool with the manufacturing centre of Manchester. Therefore the canal passes through very varied landscape starting in modern, "flashy" Salford then passes through open, rural countryside and ends in a mass of modern industry with mind bogglingly complex chemical plants around Runcorn/Widnes and refineries etc., at Ellesmere Port. It runs alongside the Mersey finally joins the river at the Eastham ship canal entrance near Birkenhead.



Our Ferryboat Royal Iris

We arrived at Birkenhead at 1600hrs where most disembarked to visit the U-boat museum to explore U-534. The only U-boat that refused to surrender, she was sunk by a Liberator from RAF 547 Squadron and spent 40 years on the sea bed before being salvaged and put on exhibition. The rest of us crossed the Mersey to spend some time in Liverpool before our coach took us back to Salford in time for dinner. On Tuesday some left for home or further visits and, since there is so much on offer in Salford and Manchester (e.g. The Lowry Centre, The Imperial War Museum North, The Museum of Science and Industry), some stayed for another fascinating day before leaving on Wednesday.

We have to thank Peter for coming up with this unusual idea and, more importantly thank both Peter and Chris Buck for all the work they did in organising this event for us. It certainly proved to be a great success for one and all, and was definitely worthwhile.

David Hole

Ed: We got sunburnt in Manchester!!

GENERATION UPDATE – 2014

Some interesting provisional data for 2014 has been issued by the Department of Energy and Climate Change, which shows gas accounted for 30.2% of UK electricity generation followed by coal at 29.1%, renewables at 19.2% and nuclear at 19%. Net imports via the interconnectors accounted for 6.1% of electricity supplied.

Electricity generated in 2014 fell by 6.7% from the previous year to 335TWh, whilst final consumption fell to its lowest level in 17 years, due largely to a relatively warm year and to improving efficiency of utilisation. (Source DECC 26 March 2015)

Barrie Phillips

VISIT TO HAYNES MOTOR MUSEUM

On a sunny Saturday morning in the middle of May, 30 members and friends met in the café of the Haynes Motor Museum near Castle Cary. The recently constructed building was designed specifically to house a collection of over 450 classic vehicles and cost about £6 million. For about an hour before lunch we were taken for a quick guided tour of the 10 'halls' which house the collection. Our guide started by providing a brief outline of the history of the collection which was started in 1985 by John Haynes of Haynes Motor Manual fame. Since the publication of the first these manuals, nearly 50 years ago, over 200 million copies have been sold worldwide. Although car maintenance for the amateur has changed enormously since then with the introduction of sophisticated electronic engine management systems, clutches still need changing and brake pads renewing and the Haynes Manual publishing business still thrives and has annual revenues in excess of £30m.

The museum, however, is run as a trust, separate from the publishing business. The first acquisition was an old Morris Oxford which was quickly followed by another 32 vehicles, which were initially housed in a disused sawmill. These have been added to over the years to form the present collection worth many millions. Many of the vehicles are unique and, in that sense, priceless whilst many others have a value because of their history of racing success or of previous ownership or usage. Whilst the vehicles have been beautifully restored and were in excellent condition, some probably better than the day they left the factory, they were not all perfect. A significant number of them are still driven and used for films and weddings etc. In fact, the museum itself is licensed for weddings and an area was being set out for one which was to take place on the afternoon of our visit.

After lunch in the museum cafeteria, we made our way independently around the collection. Each of the 'halls' has a theme e.g. the beginnings of motoring, veteran and vintage, motor sport, the American collection etc. The hall labelled 'Memory Lane' excited considerable interest amongst our members as many remembered seeing similar cars on the road and had often themselves owned or driven a similar model.



David & Chrissie Hole

The American cars were nevertheless impressive if only for their size and power. Many of the 1930's and 40's models were familiar because of their appearance in films and one of these, a 1931 Duesenberg, took pride of place on a podium. Being one of only 8 made, it has an estimated value of about £6m. However, to my eye, the American designs produced later, in the 1950's, were extravagant, owed little to practicality and were totally outrageous in many cases. Even so, in such an extensive and diverse collection, I'm sure everyone found their own particular favourite during the visit, be it a Mini or a Rolls Royce, an Aston Martin or a Ferrari.

Each exhibit had its own brief information panel and one particularly caught my attention. It described it as a 1915 Horstmann. Its maker, Sidney Horstmann, was fascinated by the 'new' motor car and left the family watch making business to work for Bath Garages Ltd so as to gain experience before he set up his own business. He produced about 1500 cars, of which only 10 still exist. The family business is now over 160 yrs old and made time-switches etc for the ESI including SWEB; that's another story! The last remaining family member is Roger, a member of this Society. The visit was very interesting and enjoyable and our thanks go to David Hole for arranging it. *David Peacock*

CRAGSIDE CORRECTION

Some of the facts stated in our article on Cragside in the last issue weren't quite correct, so Ian West of AIA kindly gives us the proper details and more.

Joseph Swan demonstrated his first incandescent bulbs in Newcastle in 1878, probably powered from batteries, and it is likely that he also used them in his own house. It took Swan another two years to perfect and patent his design and William Armstrong's house, Cragside, is the first documented example of their practical use – a letter written by Armstrong in January 1881 describes his installation with 45 bulbs. These lights were powered by a hydro-electric generator which Armstrong had built in 1878 to power machinery on his estate. Armstrong also experimented with using arc lights inside his house and estate buildings, as did Lord Salisbury at Hatfield House in 1880 and David Salomons at Broomhill, Kent as early as 1874. Battery- and dynamo-powered arc lights were often employed for lighting the gardens of great houses for special events throughout the 1870s, so the question of which was the first house to be lit by electricity is not easy to answer.

Armstrong was perhaps the first person to use water power to generate electricity. In 1886, he built a new generator house closer to the mansion. The photograph which accompanied your article shows an early dynamo similar to the one Armstrong originally employed, which is on display in this later generator house, but it may not be the actual one; reports describe Armstrong's original dynamo to have been made by Siemens whereas the one on display was made by Crompton. *Ian West (AIA)*

VISIT TO BUCKLAND ABBEY

On a warm overcast day, 22 members and guests travelled to Buckland Abbey near Yelverton with lunch at the 16th century 'Who'd Have Thought It' Inn at nearby Milton Combe.

The narrow undulating road to Buckland gives its location a remote feel whilst being still relatively close to Plymouth and the sea. The Cistercian Abbey was established in 1278 by Amicia de Redvers, Countess of Devon with its large estate. For 250 years the abbey and its monks prospered but by the Dissolution of the Monasteries only the abbot and twelve monks remained. Henry VIII sold the abbey to Sir Richard Grenville in 1541 and his son (also called Richard), who sold it to Sir Francis Drake in 1580. His descendants retained it for 370 years before it was sold to a local landowner in 1946, who passed it to The National Trust. The Plymouth City Museum display some of their collections there.

It was great to find that one of the two guides was fellow SWEHS member and ex-SWEB Brian Byng. As we approached, we had good views of the abbey and the nearby countryside. The Abbey has many fascinating parts with its later conversions into a family home whilst still retaining its religious past. No doubt we all had our favourite features such as the tower, great barn, the ox sheds, the kitchen wing, the great hall, the chapel, the Drake chamber or especially, Drakes Drum. In addition the fine carpentry and the plasterwork of ceilings are to be admired.

In the great barn is an 18th century cider press and apparently estate workers used to drink one gallon a day due to the poor quality of fresh water. The barn was used for farming purposes but during the last war was a naval store. There are many paintings throughout the Abbey, the Nave Gallery has the Rembrandt self – portrait that expert opinion believe is a genuine work of the master. Another eye catching painting was in the chapel corridor of Lady Elizabeth Drake (Lady Seaton) whose eyes always seem to be following you.

The garden is attractively laid out and of mainly 20th century design as a result of work by National Trust advisors. Buckland Abbey has many historical aspects to it, Catholicism and Protestantism, Grenville and Drake, Royalist and Parliamentarians, monastery and family home to name but a few. Thanks are due to John Ferrier for organising the visit. *David Cousins*

ELECTRICITY HOUSE LAUNCH

We reported in the December edition that Electricity House in Bristol, the original head office of SWEB from 1948 to 1988, is to be converted into flats. Building works have moved fast after Crest Nicolson bought the building with the first two show flats completed in the prow of the building in May this year. Following our donation of a 1936 artist impression picture and historical photographs to the project, Peter Lamb and David Cousins were invited to the launch, when the press were there to record the

occasion with pictures appearing in the Bristol Post the next day.

We were shown around the finished flats, interestingly the two bedroom flat (fully furnished) was situated in the Chairman's old office and was being offered at around £ ½ M!! The sales material states that the building designed by the famous architect Sir Giles Gilbert Scott, who designed Liverpool Anglican Cathedral as a young man and then went on to design the well-known iconic power stations in London at Battersea and Bankside and the red telephone boxes, was in the Art Deco style. Well, Crest Nicholson have decided to exaggerate this aspect by reinstalling the front main marble staircase, which had been removed by the previous redevelopment, and installing Art Deco balustrades with the front circular window area converted to a large reception lounge with a Consierge. You might realise by now that the flats on offer are luxury flats. The previous redevelopment for Royal Sun Alliance Insurance renamed the building "West Gate" and converted the well of the building into an Atrium which is being retained in a new form. The building is being called Electricity House once again.



The New Foyer & Consierge & David Cousins

CHINA - THE BIGGEST POLLUTER?

Here is a good read "China – a Wolf in the World" by the ex-MP George Walden, who spent many years in the diplomatic service in both Russia and China being a fluent speaker in both Russian and Chinese before becoming an MP. His view of China in the future is very interesting, particularly about pollution. His book was written in 2008 and stated that Chinese energy is 80% from coal, with electricity consumption rising at 15% annually. The Chinese are touchy about being pushed around putting thousands of miners out of work, saying that the West were polluters for two centuries whereas China has only done it for 30 years.

The Green Lobby say that renewable energy should be the top agenda to ensure that we are minimum polluters regardless of other states' actions throughout the World i.e. a holier than thou attitude. Are we rushing headlong to close our efficient coal-fired power stations too quickly? What do you think?
Write to the editor with your views.

TESLA BATTERIES

We reported in the last issue that Tesla Motors of California are making the most advanced batteries, so it is not surprising that they are turning their attention to batteries for domestic use. Their "Powerall" batteries will be available shortly in UK, which are priced significantly below other manufacturers for use of energy storage in the home i.e. electricity from solar panels etc. This is the technology WPD are pioneering in their experimental scheme on a Bristol housing estate described by Paul Jewell at our recent AGM.

IET REGULATIONS

The IEE Regulations have been updated as the IET Wiring Regulations 17th Edition. It has been given extra powers as previous copies as BS7671:2008+A3:2015 and is effective from 1st July 2015.

ELECTRIC SCOOTERS

Paris has launched an experimental scheme for hiring electric scooters, since the City was first to introduce hired bikes, with the aim to get people out of their cars and onto two wheels. This is all in the interests of reducing pollution. The scooters have been made in Germany and have a top speed of 28mph and can cover 65 miles before the battery is flat. Potential subscribers will download an application from their smart-phone and will be told where the nearest scooter is available. There will be no keys and helmets will be stored under the saddle. Meters will be turning until the scooter is returned; costs are estimated to be 12 euros for 1 hour.

MAGLEV TRAINS, JAPAN

The Japanese are testing a new train, the Meglev, which runs on a cushion of air. It is raised off the track (levitated) by magnetism and has been shown recently to achieve 600km/hour or 370mph, which means that it could be used between Tokio and Osaka cutting travel times to 67 mins or London to Edinburgh, cutting journey times to around an hour. The Americans are looking at it for a new rail link between New York and Washington. The train runs on rubber wheels at low speeds. Wire coils are fitted at the side of the track and superconducting magnets on the train. However don't expect to speedier action on this since it is very expensive new technology.

CHANNEL TURBINES

Construction of the first off-shore wind farm in the Channel is due to begin on the £1.3 billion Rampion Wind Farm consisting of 116 turbines off the Sussex Coast. They will be visible from Beachy Head to the Isle of Wight, being 700ft tall, and will be capable of producing 400MW of electricity. Extra-ordinary that the main substation is well inland at Twyneham, near Haywards Heath requiring a cabling from there across the South Downs National Park. The Park authority protested but was overruled by the Government. It would appear that the Government are to concentrate on off-shore installations since they are withdrawing the subsidies for on-shore wind-farms involving as many as 2500 turbines which now may never get to turn!! This was a Tory manifesto commitment.

SINGAPORE SUPER TREES

This year on my visit to Johor, Malaysia, our daughter took us often into Singapore and we visited the new Gardens-by-the-Bay Park built on recovered land near the Marina Bay, (the original port), but is now dammed and therefore consists of fresh water from the Singapore River. At the Park, they have built two domes similar to the Eden Project in Cornwall with a major difference being that they are sub-tropical and need to be cooled, since the outside temperature is around 35 degrees being situated near the Equator. To do this they have designed and erected what they call "Super-Trees" as shown. They are multi-functional towers providing ventilation but also collecting water when it rains and they have solar panels fitted around the top vents. The first is "Flower Dome" featuring the Orchid and the second is the "Cloud Forest" featuring a major waterfall. The "Super-Trees" also provide shade being covered in trailing plants.



Singapore Super Trees

Electricity Supply Engineers may wish to know that around Marina Bay has been installed a common services tunnel (CST). Singapore claims to be the second Asian country after Japan to implement a comprehensive Common Services Tunnel system to distribute various utility services to all developments in the Bay. The network of purpose-built tunnels house water pipes, electrical and telecommunication cables and other utility services underground. CST not only improves reliability of services supplies but allows easy maintenance and new installations. It also has 100% emergency backup services and the capacity for expansion to meet changing utility needs. **Peter Lamb**

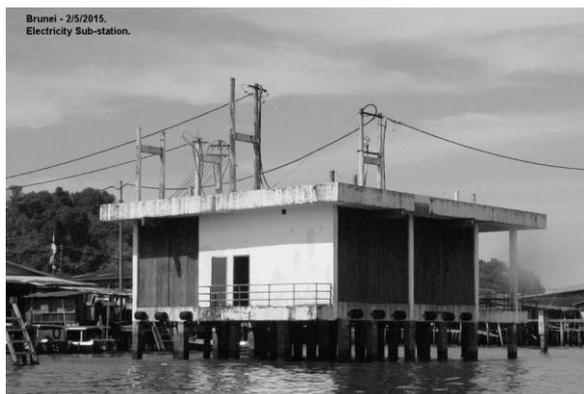
HI-TECH BRISTOL & BATH

According to the Times June 22nd, the West Country is fast becoming a Hi-Tech Centre particularly Bristol and Bath, home to everything from film and media to drones and microchips. However the experts say it is difficult to be specific because most of the technical companies make components that go into somebody else's sub-assembly, which is part of a bigger product.

Some examples are from Bristol University spin-offs with a firm making drones to detect and map radiation levels in Fukushima, Japan and another Open Bionics making 3D printed robotic prosthetic hands.

WARBURTON HOLIDAYS

Graham Warburton has been visiting the Far East and sent this despatch.



Electricity substation on stilts in Brunei

On a recent visit to the Far East we visited two villages situated on lakes. The first was in Cambodia, where, on Tonle Sap Lake, there is a floating village. The lake varies in depth from 1m to 12m and from 250 sq.km to 12,000 sq.km in the dry and rainy seasons respectively. The inhabitants rely on fishing and there are no utilities connected. The other village was in the Sultanate of Bunei where the houses are on stilts with walkways between and an electricity supply is provided. What was also interesting is that there is no income or purchase tax, free health service, where, should the required treatment not be available, the patient is sent to Singapore. Likewise with education, pupils could be paid to attend an English University. Also housing is provided for all. The Government builds 4000 houses each year. All this comes from being oil-rich whereby the population benefits from the country's asset and not multi-national companies. Good eh!

Ed : Graham's not quite correct, Shell are very actively involved out there.

NUCLEAR SUBMARINES

Members may recall that during the General Election there was considerable discussion about proceeding with a third generation of nuclear submarines. The Conservatives promised to build 4 to ensure that there would always be one at sea. Labour thought that 4 or maybe 3 would be sufficient. Other parties seemed to be against building any. I recently had the pleasure of visiting Cherbourg, where the French submarines are built. There is a very interesting museum 'La Cite de la Mer', where you can tour the only nuclear powered submarine in the world that is open to the public. The 'Redoubtable' is a first generation nuclear sub which entered service with the French Navy in 1971. She weighed 9,000 tons and was equipped with 16 x M4 ballistic missiles with nuclear warheads and torpedoes. The missiles had a range of 2000 miles and were designed in France. Six submarines in this class were built. (By contrast UK's first comparable machine 'Resolution' entered service in 1968. She was armed with torpedoes and 16 x Polaris missiles with a slightly longer range, and came from the USA. Only four of this class were built. The second generation French submarines started with 'Triomphant', which entered

service in 1994. She weighs 14,000 tons and carries 16 x M45 missiles with a range of 4,000 miles (later uprated to 7,000 miles), Exocet missiles and torpedoes. Only four of this class were built. (The equivalent UK machine is Vanguard which entered service in 1991. She is armed with torpedoes and American Trident missiles. Again four have been built.) The Redoubtable was the most complicated machine I have ever seen and it alone could probably have destroyed the world as we know it. France, like UK, is now considering third generation machines. The USA has a much larger fleet of bigger nuclear submarines. The biggest submarines ever built were the Russian Typhoon class weighing 48,000 tons but now considered obsolete. I hope you can sleep easy in your beds!

If you don't like submarines, the museum has a large aquarium, a large collection of submersibles used for exploring the depths and a re-creation of the sinking of the Titanic.

John Coneybear

RIVER RHINE CRUISE

Exactly two weeks after our Society trip on the Manchester Ship Canal in April, Ellie and I began a cruise on the River Rhine. We travelled with Scenic Tours, and found we were sailing on the maiden voyage of a brand-new ship. Although the Tour Company is Australian, the vessels are registered and built in The Netherlands. The scenery along the Rhine was very picturesque, with its succession of castles, and the weather was bright and sunny. However, my enjoyment of the cruise was enhanced by the 'shaking down' of the new crew and the new ship. The first thing to take place was a practice evacuation drill, where we all donned lifejackets, and proceeded onto the deck to be counted. During a later stage of the 8 day cruise, an Inspector came on board and proceeded to carry out various checks on the ship. The most obvious to us passengers was the 'emergency stop' test. The distance allowed was (I think) 300 metres, and by evening all the several sets of propellers, a braking distance of about 180 metres was achieved.

Following these checks I asked if it was possible for me to see the engine room. A fellow passenger, a mechanical engineer and myself were given special permission, and we spent about 30 minutes in the part of the ship that passengers never see. The Chief Engineer was from Romania, and so his technical explanations were a bit difficult to follow. However he did allow me to take several photos of the engine, gearbox and digital control panels. All in all it was an interesting trip, even though we missed out about one third of the Rhine due to the river level being too high for ships to pass under bridges and through locks. Luckily we had no such trouble on the Manchester Ship Canal, where all the bridges swung aside or retracted to let us pass!

John Haynes

MEMBERS NEWS

Mike Wreford is having a knee replacement, we wish him well.

THOSE 3 LITTLE WORDS!

No, not those but “please reply by –“. A lot of work goes into organising meetings, visits and of course trips involving nights away. At most of these events we have to confirm numbers attending, book meals and accommodation prior to the event taking place. I know that we are all getting older, but can we all please reply to requests in good time otherwise some folk may be disappointed and we don’t want that.

Then there is those other words – “you can find it on our website”! Like heck you can!

SOX HOSEGOOD ARCHIVE

Further to our report of the passing of Sox Hosegood, SWEB’s first helicopter pilot and commander of the unit, we have acquired his slides of the early years of the helicopter units operations, including bringing back the first Augusta helicopters from Italy. David Cousins has copied them for a future event for the Society.

NEW EHV LINK TO FRANCE

A new 1000MW DC cable link is to be established through the Channel Tunnel. It will be linked to the British Grid 400kV system, but will have a maximum voltage of 320kV DC and it is proposed to connect it to the French rail system of RTE’s 400kV transmission network. It will be financed by a joint venture group Star Capital Partners and Eurotunnel Group. Work is to begin in 2015 with commissioning in 2018. With all the publicity associated with this to shareholders, there is not a mention of involvement of EDF, even though it states that it will provide “an energy exchange facility of the two neighbours”!! According to the National Grid another is being planned across the North Sea to Norway to benefit from their Hydro-electricity.

WINDMILL MUSEUM

If ever you are visiting South London at anytime, there is a Windmill Museum on Wimbledon Common housed in an old windmill of course. It consists of many models of the great variety of windmills that exist across the English countryside explaining the different variations in the construction and operation from 4 to eight sail varieties. The collection of models chart the development of the windmill from its earliest form through to modern day wind turbines. These models, most of which are beautifully detailed models of actual mills, illustrate changes in mill technology including the development of sails and the fantail.

There is also a model of a modern wind turbine to the same scale. The label beneath states that the electricity so produced is twice as expensive as other means due the high cost of manufacture and maintenance which is the reason it is highly subsidised! *Peter Lamb*

STOP PRESS

British energy crisis has deepened with the closure of many power stations. National Grid has predicted that generating capacity is likely only to exceed demand by 1.2% this coming Winter. NG could be forced to pay generators to reopen closed power stations in an emergency. Last winter the margin was only 4.1%.

WELCOME TO NEW MEMBERS

Peter Willis – We are pleased that Peter has joined us; when his “patch” in WPD included Cairns Road substation, he looked after our interests well.

EULER’S FORMULA

My 16 year old grandson is a bit of a wiz at maths and introduced me to Euler’s Formula, pronounced “Oilers”. It concerns regular shapes such as a cube that have corners (vertices), faces and edges.

The formula is: $V - E + F = 2$

Where V = the number of corners, E = the number of edges and F = the number of faces

For a cube, V=8, E=12 and F=6, so $8 - 12 + 6 = 2$

For a triangular cone, V=4, E=6 and F=4, so $4 - 6 + 4 = 2$

It even works for a football made up of pentagonal and hexagonal patches and the answer is always 2!

David Hutton

ELECTRICITY POEM

(From the Torquay archive April 1933)

**In days of old, so we are told,
Wives stayed at home, they could not roam,
To keep homes bright was their delight,
So all the day they worked away,
They never stopped until they dropped,
Those wives of old, so we are told.**

**Those wives of old, they were not told,
Of future homes, electric homes,
Kept clean and bright by labour light,
Homes of pleasure, with hours of leisure,
The modern home is the electric home,
So start today, the electric way.**

MODERN KITCHEN JOKE

Young son asks his father why brides always wear white. He replies that all household appliances are in white, aren’t they?

FOR YOUR DIARIES – COMING EVENTS

Sat 19th Sept MEETING AT CAIRNS ROAD, BRISTOL – TALK “COLLECTABLES WITH A DIFFERENCE” by John Bates. Lunch at Westbury Park Tavern beforehand.

Sat 10th Oct. MEETING IN DEVON AT COLDRIDGE VILLAGE HALL

Tour of Mike Thorne’s Tractor Museum, film show and a Devon Cream Tea.

Thurs 19th Nov. MEETING CAIRNS ROAD – “BRISTOL AS SEEN THROUGH THE EYES OF OLD POSTCARDS” – Talk by Mike Britton. Buffet lunch beforehand at the Westbury Park Tavern.

NEXT EDITION - This newsletter is produced every four months. Please send articles, photographs etc to :- Peter Lamb 35 Station Rd, Backwell, Bristol BS48 3NH or telephone on 01275 463160 or e-mail him on lambpandv@btinternet.com.