

HISTELEEC NEWS

NEWSLETTER OF THE SOUTH WESTERN ELECTRICITY HISTORICAL SOCIETY

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BIG CHANGES WITH WEB SITE

Following the invasion of malware to the website by a "hacker" our website had to be closed to protect visitors. After removing the malware and changing the site access password, the hacker gained access again within a fortnight. Clearly further protection was needed. Marcus has beavered away and devised a site monitoring program that checks for any unauthorised changes continuously and deletes them. The site is restored to its original state automatically and changes are recorded. Our website host has also increased security by removing some facilities that are prone to hackers. This has required a change to the way videos are displayed. Please let Marcus know if difficulties are experienced with the new method now used on site.

WEEKEND REMINDER

It is still not too late to join us on our weekend away in Swanage next year. The weekend will be for 3 nights, (4 days), from Friday 25th April 2014, and, so far, 35 members and their companions are coming. The organisers have recently spent a day in Dorset checking the hotel and our planned visits to ensure that everything is OK. The hotel really is good and stands on a cliff top with splendid sea views. The hotel will be refurbished by the time of our visit. Also Swanage is an attractive little town and a traditional resort.

Our excursions include a visit to Tyneham Village (taken over by the MOD in WW2 and abandoned) on Friday, a trip by heritage steam railway to Corfe and Corfe Castle on Saturday, a Dorset Cruise and visit to Compton Acres on Sunday, and, on Monday there is a choice of visits to the Tank Museum or the Monkey Sanctuary or the Compton Lacey Gardens – plenty to choose from! The cost per person is £256.00 inclusive. (Extra nights DBB on Thursday or Monday are available at £67.00 pp). If you would like to know more contact me, Dave Hole :- Tel : 01392 874375 or at : - gwdhole@googlemail.com

FRENCH BLACK-OUT

The French Government have brought in a new law making it obligatory to switch off lights in shop windows and on facades from 1.00am to 7.00am and for offices to switch-off lights one hour after employees leave for home. The idea is to cut the national energy bill by 200 million Euros a year and greenhouse gas emissions by 250,000 tonnes. Paris is up in arms over this issue since the Parisians pride themselves as the "City of Light" and the Minister has climbed down and agreed to leave the street lights on in Champs Elysees.

SHALE OIL & GAS

America is powering ahead with oil and gas extraction for shale rocks. It transpires that the Americans have found cheaper ways of drilling which has opened opportunities in a wider area such that the number of wells have doubled in five years. It is said that America will overtake Kuwait as an oil producing nation. In Texas 1% of their water is being used for fracturing the rocks i.e. fracking and no problems have been experienced of earthquakes or water pollution. It is predicted that Shale Oil could reduce the price of oil worldwide. In Britain it is said that there is enough Shale Gas for 1,500 years, good news may be but will we be able to recover it in our densely populated island?

NEW SLANT ON SUSTAINABILITY?

Ellen MacArthur, the well-known round-the-world sailor has given up sailing for the moment to promote an idea of hers. At 37 she has set up a Foundation in her own name, what I may call it "a business forum", to pursue a sustainable concept she calls a Circular Economy instead of a Linear Economy. The idea is that household appliances, cars etc would not be bought outright, but you would pay as you use it with the manufacturer retaining ownership. At the end of its life or when you had sufficient use out of it, the machine would be replaced with a new one. She is spending a lot of time with speaking engagements and by the end of this Summer, her Foundation will have issued teaching material to 50% of UK's secondary schools.

WIND FARM REVOLT

During June there has been a concerted campaign in both the Times and the Telegraph against Wind Farms. The gist of the complaints appears to be that they are ugly, unreliable and a waste of money". The comments were inspired by a statement saying that 68% of the population support Wind Farms. One response to this was he doubted whether these supporters realise that wind energy is intermittent and generates only over a limited range of wind speeds. But because of their high visibility they confer a comfort factor to the public that something is being done about global warming. I am not sure where one responder got his information, but he said that in Spain, Germany and Denmark they had realised that wind energy is not that cost effective and had reduced the subsidies on this sector as soon as it was politically expedient to do so. When will we learn the same lesson, he asked? *See John Dike's article of the considerable detail involved on page 4.*

COLYTON – A DAY OUT

On Saturday 18th May, 25 members and friends, including new member John Watts from Salisbury, made their way to Colyton on a beautiful spring morning. Those travelling from the west had to contend with the Devon Show and it took Ted Luscombe three hours to travel from Plymouth. Those of us from the north had a road diversion at Axminster and then diversion signs that disappeared. With the help of SatNav, and in my case PatNav, we all arrived at a car park in Colyton to be greeted by Chairman Dave Hole and his family who then directed us to a café for morning coffee. We then split up into small groups for a short walking tour of the historic town of Colyton – known as the “Most Rebellious Town in Devon”!

Colyton first appeared as an ancient village around 700 AD and features in the Domesday Book as 'Culitone'. It grew into an important agricultural centre and market town with a corn mill, saw mill, iron foundry and an oak bark tannery that is still functioning. It was called the "most rebellious town in Devon" due to the number of its inhabitants who joined the Monmouth Rebellion in 1685. Landowner Henry Courtney was beheaded by Henry VIII and his lands were confiscated. Local merchants and yeomen raised 1,000 marks and bargained with the Crown for the return of that portion of the estate which lay within Colyton. (1,000 marks was about 400 times the annual income of a successful merchant). The community regained the properties under a Deed of Enfeoffment on condition that an assembly of Feoffees ensured that all the income was spent on "good and commendable" uses for the community.

The Feoffees were inaugurated in 1546 and they established the first Grammar school in 1559. Later, they were responsible for channeling fresh water into the town and for forming the early fire service. They have been a registered charity for some years and to this day the Chamber of Feoffees meets regularly and works with the town council for the benefit of the community.

A plaque on the Town Hall indicated that mains electricity came to Colyton in 1946. Peter Lamb has since found out that in 1950 Colyton, was one of the few non Statutory Undertakings in the South West. SWEB had no duty to take them over, but reached an amicable agreement in 1950, paying them off for a paltry £4,000.

We then moved on to the “Tram Stop Café” at Colyton station for lunch and then boarded a tram for the return trip to Seaton. We had sufficient numbers to have our own tram and had wonderful views over the Axe valley and estuary. There was just enough time for a look at the sea and an ice cream before returning to Colyton.

The tram route was originally that of the railway line from Seaton to Colyton that was closed by Dr Beeching. The Seaton Tramway originated at the Lancaster Electrical Company in Barnet, North London that built battery electric vehicles such as milk floats. Its owner, Claude Lane, had a passion for trams and built an electric tramway at Eastbourne in 1953. The expansion of the road system in Eastbourne brought about the closure of

the tramway and so Claude negotiated and moved his tramway to Seaton and it opened for passengers on 28th August 1970. The gauge was increased from 2ft to 2ft 9ins to give more stability and initially the line went as far as Bobsworth Bridge, named after the fare of one shilling! Sadly, Claude died in 1971 and never saw his project completed.

David Hutton



SWEHS Party at Seaton Station awaiting return trip
(picture David Cousins)

COTEHELE HOUSE VISIT

It has to be said that the weather on Saturday 22nd June was, at best, indifferent and at the worst, terrible, but, fortunately, it didn't stop the 16 members who attended this event from enjoying the day. Cotehele is situated at Calstock, on the Cornish bank of the river Tamar and is probably the oldest Tudor house surviving in England. It's origins started around about 1300 and various building work carried on from 1485 to 1627. For centuries it was the home of the Edgcumbe family who, like so many, loved showing off their home to guests, including royalty. The granite and slate stone walls, the multitude of tapestries, the oak furniture and floors create quite a gloomy atmosphere in the house. In fact my favourite, and what I thought was the grandest room turned out to be for the servants; even the kitchen felt more welcoming than most of the rooms!

In addition to the main buildings a short walk through the magnificent gardens takes one past the “Chapel In The Woods”, (the scene of a daring escape made by Sir Richard Edgcumbe) down to Cotehele Quay where one finds an outpost of the “National Maritime Museum” with lime kilns, a pub, a discovery centre, the restored Tamar sailing barge the “Shamrock” and much more. From the quay another short walk up the “Morden” stream takes one to Cotehele Mill. Here one finds a working flour mill, still producing wholemeal flour, recreated workshops, and even a small hydro-electric plant.

Lots to see, lots of interest, and very enjoyable, so we must thank John Ferrier for organising an excellent day out. If you missed it you missed a treat! *David Hole*

STORKS NEST ON A 33kV PYLON



Here's a picture you might be interested in. It was sent to me by some French friends, who were aware that I am interested in HV transmission lines through my career. They took the picture whilst on holiday near Pamplona in Spain and shows a couple of Storks nests on the cross arm of what looks to be a 33KV transmission line.

Michael Kay

SEVERN BARRAGE IS DEAD

A House of Commons Select Committee, who have been considering the estuary scheme, have decided it would be too costly and would wreck the sensitive ecosystem of the Severn Estuary. The group, who were promoting the £25billion scheme Hafren Power, had not shown sufficient value as a low energy source even though it would generate 5% of the UK's electricity.

CAMBORNE CHURCH LIGHTS

The historical Camborne Parish church of St. Martin & St. Meriadoc has just been fitted out with a new lighting system using LED's by a British firm called OMC. The building is now illuminated by 800 high powered LED's incorporated into a range of floodlight displays according to the latest IET Journal. The LED scheme amounts to 800watts whereas the old system using standard filament bulbs totalled 10kW, which gives an estimated saving in electricity costs of 90%. According to the installers this is first church in the South of England to install this system.

OMC stands for "Optoelectronic Manufacturing Corporation" based at Reading, where they are designers and manufacturers of new complex LED lighting systems including fibre-optics, internal luminaries and floodlighting.

CORNWALL INCINERATOR

A controversial incinerator has been given the go-ahead to be built at St. Dennis in Cornwall. SITA the French owned waste disposal firm has signed a 30year contract worth £1.4 billion to build this incinerator which will generate 16MW of electricity. Interestingly the publicity material says it will power 21,000 homes, that's 0.76kW per house!! It is anticipated completion in 2016. More information on this may be of interest – is this another ploy to get French made generating plant into UK?

APPLIANCE SWITCH-OFF

In April there was considerable argument in the papers when an EU proposal first hit the headlines that devices should be fitted to electrical household appliance to switch them off remotely at times of peak usage for short periods thus saving expensive generation. It was billed by the newspapers as "Big Brother Technology". It transpires that an experimental system has been installed on the Danish Island of Bornholm costing the EU some £17.5 million, fitting smart meters and devices to washing machines etc., but the results of this experiment have not yet been disclosed.

BRISTOL HARBOUR FERRY-BOAT

A new boat has been launched into service in the Bristol Harbour. It is described as the "UK's First Fuel Cell Ferry", since it is run on hydrogen and is sponsored by the City Council as "Green Initiative". The publicity material is a bit short on detail but mentions the name of the firm manufacturing the driving system, it is Auriga Energy, who have also put money into the project. The 12 passenger carrying boat is powered by an Auriga fuel cell engine, and it is hoped that it will demonstrate the viability of hydrogen fuel cells, which reduce port and waterway pollution through its zero emissions.

BATTERSEA REDEVELOPMENT

The continuing saga of Battersea redevelopment continues. On the 4th July at last the redevelopment has been scheduled to commence, but not until October. For many it will be a big relief since the building has lain idle and derelict for 30 years. The Malaysian owners have signed a £100 million contract to redevelop the site into residential and commercial scheme involving 3,500 homes, the first phase of which will comprise 866 apartments all of which have already been sold for £600 million. The iconic building will retain its Art Deco styling with the four chimneys, which will have to be replaced due to their poor state of repair.

SOLAR POWERED AIRCRAFT

A solar powered aircraft, the "Solar Impulse", see picture below, has flown from California to New York. It touched down in early July after setting out from California in May. It is a staggering achievement but took rather a long time. It has four motor driven propellers and the wings are made of carbon fibre. The solar cells are mounted on the wings and the tail flats. To give some idea of the operation, the third leg from Dallas to St. Louis involved the aircraft flying through cirrus clouds but it continued to charge its batteries. The flight distance of 1,040km (560 nautical miles) was completed at an average speed of 49 km/h (26 knots).



WIND FARM MAYHEM

I have requested that our local MP takes up the issue of planning applications for wind farms. At present the developers employ their own consultants to prepare the assessments regarding environmental impact, landscape issues, noise, flicker, and possible benefits. Obviously these consultants hope for future work and so their assessments are often completely biased, even to the extent of downright porky pies, in favour of the application. Our local planning authorities should, in theory, evaluate the validity of these assessments but they say that they are swamped by applications and have to accept the detail on trust. They say that they would request the removal of a turbine if an issue arose in the future. Rather unlikely I would suggest!

In the meantime local residents have to become “experts” to fight these applications in lieu of the local authorities. I believe that the developers should have to pay for the use of independent consultants that are under the control of local authorities, in the same way as we have to use a building inspector for building work at home.

In our local area we are seeing applications for “hobbled” turbines. These are large 900kW turbines, with 900kW transformers and control equipment, but with their output restricted to 500kW to take advantage of a tariff of 17.5p per kilowatt as opposed to only 9.5p per kilowatt above 500kW. But we will have the environmental impact of a much larger machine without the full renewable energy benefits. Even the Dutch salesman for the EWT 500(900) turbine said the British system is very strange being all about subsidy rather than environment!

The pro-turbine brigade says that the amount of subsidy for fossil fuel energy is far greater than for wind energy. It is important to understand the reasons for this. In the UK by far the largest amount of energy subsidy (around 4 billion) is that paid to reduce the VAT on oil, electricity and gas from 20% to 5%. Obviously the amount of this subsidy credited to wind will be very low as the contribution of our power needs from wind is a very small percentage of our total power needs. The subsidy for fossil energy is designed to reduce consumers’ bills whereas the subsidy via feed-in-tariffs to encourage wind does just the reverse!

As predicted by us “dinosaurs of the power industry” the instability of wind and solar can cause mayhem on the Grid! This has really been apparent in Germany, a great exponent of wind (and a major producer of turbines). In 2011 German wind farms had a total capacity of 29GW, around a quarter of the total demand, but were so inefficient that they only averaged 5GW of output. But they had to be backed up with 29GW of fossil fuel stations in case the wind died. These fossil stations were running so inefficiently that they produced more CO₂ than the wind power could save! The instability of the German Grid has forced Germany to build 16 new coal-fired plants and 15 gas plants in such a hurry that they have abandoned the concept of “carbon capture and storage” which would allow a sensible continuation of the use of conventional generation.

In India they have come up at a radical solution to try to stabilise the Grid by hitting at the pockets of the wind farm developers. By withdrawing subsidies there has been a 42% drop in wind farm installations. Furthermore wind farms with a capacity of 10 MW or more are ordered to forecast their generation in 15 minute blocks for the following day by making use of seasonal records and weather forecasting tools. Missing estimates by more than 30% will incur fines that will be paid to state utilities through a Renewable Regulatory Fund.

Let’s hope that we can adopt the same common sense in the UK!

John Dike

MEMBERS NEWS

Glyn England - Our esteemed member, Glyn England, died in early July at the ripe old age of 92. Glyn was supportive of our society and very interested in our activities. He was born in Tonyrefail, in the Welsh valleys and, on finishing school at the age of 18, cycled to the South-East in search of work. This was long before Norman Tebbit’s famous exultation to the unemployed ‘to get on their bikes to go in search of work’. Having gained an engineering degree, Glyn made his career in the Electricity Supply Industry (ESI). This was predominantly with the CEGB, where he eventually rose to the top of the organisation to become its chairman.

However, prior to that appointment he was, for a few years, chairman of SWEB. This was, perhaps, a somewhat surprising appointment for someone with no Area Board experience. Possibly it was an astute political move on the part of the energy minister of the day in attempting to bridge the divide and foster better relationships between the two parts of the ESI, maybe with Glyn being groomed for his future role. He had become CEGB chairman in 1977 – a significant time in the development of the Industry. Lord Plowden had just reported on a re-organisation of the ESI and things appeared all set for a change to a unified structure. Francis Tombs, SSEB chairman, had been persuaded to take on the role of Electricity Council chairman with the expectation of heading up the proposed new Electricity Corporation. Glyn was to have been appointed as his deputy, an astute move to bring the CEGB on side in support of the new organisation. However, as so often happens with government involvement, it all came to end in tears. With a change of minister and then a change of government from labour to conservative, the proposals first got shunted into a siding and then finally hit the buffers. Tombs resigned to seek pastures anew whilst Glyn’s five year appointment as CEGB chairman was not renewed when it came to an end in 1982. Thus the Industry had lost two good leaders simply at the whim of government.

In retirement, Glyn continued with some consultancy work, balanced with his love of the countryside and life at his farm at Ubley, in the Mendips. He was working to the last, for on the day that he died he had apparently sent an email at 7.53am to the Bayswater Institute, a small consultancy for which he was chairman of its trustees.

Chris Buck

MEMBERS NEWS cont.

Pat Bilyard - We are very sad to report the death of a very keen member. Pat was a popular chap with work colleagues and is well-known to many of us. He spent a long time on operational duties before working as a Control Engineer firstly in Somerset and then finally at Sowton. He frequently attended our events.

John Dike - John gave a talk on "Shackleton" in Backwell in July. He has been invited to present this talk to us in Devon next year.

Norman Dyer - We welcome a new member, who hails from Puriton near Bridgwater.

SOLAR PANEL SPAT

Following the EU threatening to impose import duties on Chinese solar panels, the Chinese Government has suggested that they would retaliate by imposing duties on French wine. China imports £850 million of European Wine most of which is French. Many scenarios have been put forward suggesting that taxing French wine would boost home-grown Chinese wine. However the French think it could benefit the higher quality French wines.

CAR SPEED RECORD

The potentially fastest car in the world is being made at Filton, Bristol called the Bloodhound Super-sonic Car. It is being sponsored by Rolls-Royce. RR has a distinguished record of involvement in land speed records providing the type R engine for Sir Malcolm Campbell's Bluebird and speed-boats for Sir Henry Segrave and many others. The team running this project hope to take the car to the South African to attempt to break the current land speed record of 764mph.

NEW BOOK REVIEW

Member Ted Luscombe has donated a new book to our Archive Library; it is called "**Children of Light – How Electricity Changed Britain Forever**" by Gavin Weightman. It is certainly a fascinating book and one which all electrical historians should read, since it covers the initiators of electricity supply, mainly lighting, hence the title. What is special about it is that the author has included considerable amount of information about the scientists, engineers and entrepreneurs, such as Davy, Faraday, Swan, Edison, Crompton Ferranti, Brush and Siemens, which, I would hazard a guess, has never been generally published before. Not content with the detail of the early years, the book goes on the cover the whole of the electricity generation and distribution up to modern times, including nationalisation and eventual privatisation, which is quite a challenge but not to the same depth, but still very interesting indeed.

Remember members are able to borrow items such as this from our vast archive by visiting the Archive Centre or paying for the post and packaging involved.

Peter Lamb

ELECTRIC HUMOUR

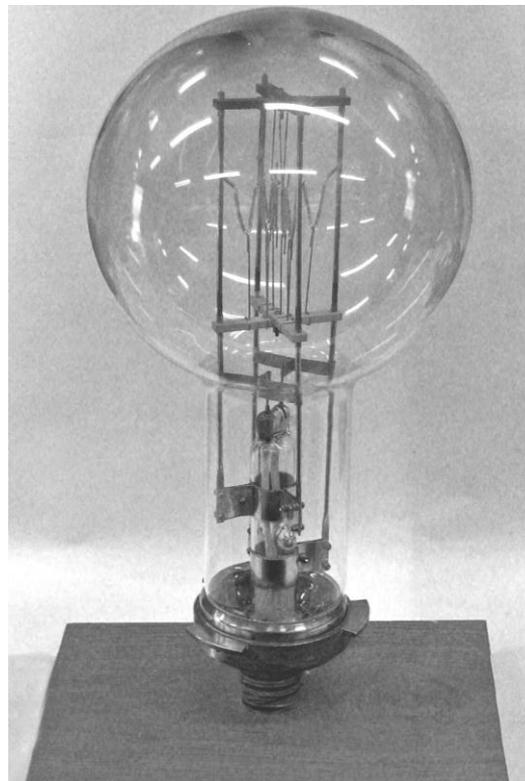
Q: Do you know how an electrician tells if he's working with AC or DC power?

A: If it's AC, his teeth chatter when he grabs the conductors. If it's DC, they just clamp together.

LIGHTHOUSE LAMP

I had an unusual present on my 80th birthday, it was a 3,500watt lighthouse filament lamp shown. It says it is a Mazda made in the UK for operation at 100volts. It has the number : 82-0901 RA on it. My friends who gave it to me are avid car-boot sale followers and picked this up on their rounds. One wonders from where had it come and was it ever used and more particularly if so where? It is now the latest new exhibit at the Museum of Electricity, Redland.

Peter Lamb



FOR YOUR DIARIES – COMING EVENTS

Tues. 24th Sept. AVONMOUTH & PORTBURY

DOCKS TOUR – Meet at The Priory Inn, Portbury at 10.30am to board coach for Avonmouth picking up guide at 10.45am for a talk and a guided tour for 1 hour. Return to the Priory for lunch.

Sat. 26th Oct. MEETING IN DEVON – "COLYTON

TANNERY – A talk at 1.30pm about the Last Oak

Bark Tannery in England". Lunch at 12.00noon

Venue : Nutwell Lodge Hotel, Lymptstone.

Sat. 23rd Nov. MEETING AT CAIRNS ROAD –

"JERSEY ELECTRICITY" – Talk by David

Padfield, Ex-SWEB at 2.00pm. David is now Director of the Energy Division of Jersey Electricity plc. Lunch beforehand at Westbury Park Tavern 12.00 for 12.30pm.

Sat. 1st Feb. - 20th ANNIVERSARY LUNCH

Visit castle Museum in the morning, Lunch at the Castle Hotel, Taunton with speaker Tom Mayberry.

Sat. 22nd March 20th AGM - Talks "Appliances &

Exhibits" by Peter Lamb & David Cousins

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