

HISTELEC NEWS

NEWSLETTER OF THE WESTERN POWER ELECTRICITY HISTORICAL SOCIETY

Web Site: www.wpehs.org.uk

No. 69

August 2018

SUMMER HEATWAVE

All those with solar panel installations must be rubbing their hands with glee. We would be interested to hear from members with the panels how they have fared.

NEW POWER LINE

Work commences in the Spring on constructing the new 400kV pylon line from Bridgwater to Bristol through North Somerset. The Government has given the go-ahead and it will be built using the new "T" design of pylons. Initial work has already been carried at Churchill BSP.

SMART METERS

A local Bristol paper has been featuring Smart Meter Revolution, asking readers for their opinions. I was surprised at the replies showing complete ignorance of consumers in power usage. Most of the anti-meter replies had no idea what items used a great deal of electricity. The article finished with seven points of benefit to convert the sceptics!!

- 1) 11 million Smart Meters have already been installed.
- 2) Smart Meters come with a handy in-home display (Mine didn't at my previous address)
- 3) Switching Suppliers is easy.
- 4) Smart Meter info transmitted through secure system
- 5) The data transmitted is protected by law.
- 6) Smart Meters will deliver a saving of £17 billion.
- 7) Smart Meters are expected to save 30 million tonnes of CO₂ by changing the way we use electricity.

The Government is keen, since Npower has been fined £2.4 million for failing to install enough smart meters, only 15,200 instead of 22,400!

TALLER TURBINES

Existing wind turbines are mostly 50-60 m tall and there are proposals to increase the height of these up to 120 m high, obviously increasing their output. The main reason for the new proposals is the fact that many of the original wind farms are coming to the end of their life and will be needing replacement. With taller masts, the wind farm sites could be increased in output, so that of 60 sites an increase could be achieved from 440MW to 1,300MW. Two conferences are being held in Germany, the first Wind Turbine Tower Conference at Bremen on 21st – 23rd August and WindEurope on 25th – 28th September at Hamburg. It is not surprising that Germany is hosting these meetings since the country has spent a trillion Euros on Renewables, but having abandoned Nuclear, is now building many coal-fired power stations to keep the lights on.

NEW BRUNEL MUSEUM

Some few years ago the Brunel Institute was established alongside the SS Great Britain getting together all the archival material of the ship and University of Bristol collection. Since then with many grants being awarded the project amounting to £7.2 million, a new museum has been created involving a new visitor centre and the refurbishment of the old Great Western Steamship Offices restoring it to its original state in 1843. The Museum is called "Being Brunel" and features 150 items of Brunel's personal effects allowing visitors to see Brunel from a more personal point of view. It covers a wide range of Brunel's activities from bridges, railways and ships illustrating what a genius he was, but also his flaws. This is a "must" visit for the Society next year!!



NUCLEAR FUSION

Many of you reading this will have assumed that Nuclear Fusion is a dead project, but a private British company, Tokamak Energy is ever hopeful challenging the public sector collaboration on the Nuclear Fusion and beating its American rivals. The new fusion optimism is based on the use of yttrium barium copper oxide (YBCO). This is a superconducting material that allows smaller less cold but more powerful magnets to operate. Professor Matt Ridley says that Britain is a leader in this technology.

SWANSEA TIDAL LAGOON

The Government has rejected plans for a Tidal Lagoon in Swansea Bay, because it would be too costly, in fact more costly than Nuclear Power. This is a shame since Government independent review last year had recommended the plan, since it would kick-start a tidal power industry. Greg Clark told the Commons, it would be irresponsible to enter into a contract with Tidal Lagoon Power, as it would be a high cost consumers and taxpayers.

TALK ON “SOMERSET COALFIELDS”

On Saturday 12 May, following a plentiful buffet lunch at the Eastfield Inn, 20 plus members and guests assembled at Cairns Road for an illustrated talk by Bryn Hawkins titled ‘From Boy to Man in the Somerset Coalfield’. His family home had been one of a rank of small cottages next to the Camerton pit, for which the toilet facilities were an outside privy down the lane. He recalled his childhood days spent playing around the pit head – no concerns about health and safety in those days! Several generations of his family had worked in different pits and his grandfather had been involved in the 1909 Dunkerton Colliery Carting Boys Strike for an extra half-penny a day (old money) for pulling loaded trugs of coal from the mine face to the roadway. A protest march resulted in his grandfather getting shot and imprisoned overnight.

At its peak there were 89 pits operating in North Somerset with coal being supplied to Portishead Power Station. Later it became necessary to mine to much greater depths but still the coal was of poor quality (containing more stone). This resulted in the power station paying much less, which didn’t cover the cost of the coal being mined. Gradually pits closed, the last in the coalfield being Writhlington at Radstock in 1973. Typically, in the latter years shafts were around 500 yards deep with coalfaces up to 1000 yards below the ground and as little as two feet in height.

Bryn’s talk contained many reminiscences of his days in different pits in the coalfield, brought to life through a well prepared and presented audio-visual display incorporating song and film excerpts. Mention was made of the pros and cons of several mining developments, including the change from carbide to battery lamps, steel hydraulic pit props replacing wood and the introduction of mechanized coal-cutting machinery which required the coal to be removed manually from the coalface at a much faster rate. Reference was made to the invaluable work of the pit ponies which became so familiar with the mining environment that they knew where to duck when passing through low sections of the walkways. Mention was made of the mining museum at Radstock as an interesting place to visit. Following a wide range of questions, which demonstrated the interest stimulated by the talk, Paul Hubert thanked the speaker and summed up the afternoon as the engineering, human and animal story of the Somerset coalfield.

Chris Buck

SEABUBBLE WATER TAXI

A team of French designers headed by Alain Thebault has designed an electric water taxi in Paris, called the SeaBubble. The full-size prototype was tested in March 2017 on the River Seine and accommodates only 5 persons. It is designed with four skids such that it rises above the water to reduce the drag, which is surprising since it is powered by a battery driving two electrically powered propellers reaching speeds of 46 km/hr and designed to operate in a no-wake zone. After raising 500,000 euros, four more prototypes are under

construction. The electric power is replenished at the landing stage by using a mixture of solar panels and turbines to charge the batteries.



Seabubble Taxi

AEROSPACE MUSEUM VISIT

Almost 40 members, family and friends met at the new Aerospace Bristol Museum on 7th June to see for ourselves the magnificent exhibits housed in converted hangars adjacent to the North side of Filton Aerodrome. The project is run by the Bristol Aero Collection Trust and houses a varied collection of exhibits as well as Concorde 216, the final Concorde to be built and the last to fly. The nine-acre site includes two First World War Grade II listed hangars, providing over 5,000 m² of public exhibition space, 1,700m² of indoor learning spaces and workshops, plus over 5,000m² of outdoor learning and testing space.

The exhibition covers over 100 years of aviation history through two world wars, exploring the role of aircraft in these conflicts, through the drama and technological advances of the space race and on to the modern day. The final Concorde is now housed in a new building, protecting it from the weather, and providing plenty of exhibition space and the chance to get up close to the new undercarriage, before entering the aircraft to view a very compact cockpit and seats for 100 passengers who could cross the Atlantic in luxury in less than 4 hours.

Our visit started after most of us had enjoyed a pleasant lunch in the cafe, and then we split into two groups each receiving an individual’s guide to the exhibition. The journey started with a Bristol Tram, and moved quickly to show how enterprise and experience of engineering could be adapted to other modes of transport. Military and commercial machines are on view, together with models of artificial satellites which are now encircling the world or are on journeys faster and further than anyone could ever have imagined. In the Concorde hangar our guides left us to see for ourselves just one of the few aircraft in this country which have inspired such iconic recognition.

All in all, we enjoyed a very pleasant lunchtime and afternoon out. The sustained interest and intention to return was more than evidenced by all of us who upgraded our entrance tickets to allow us to return sometime in the next twelve months. Thanks to David Hutton for making the arrangements. **Charles Bristow**

LIGHT METER

New member Don Rouse has donated two vintage items to our museum, an old light meter and a clamp ammeter. The light meter, calibrated in foot-candles, is certainly a fascinating piece of old equipment. (pictured).



‘ENERGY IN STORE’ PROJECT

‘Workshop’ on 22nd June 2018, held at the Royal Geographical Society in Kensington.

This project was initiated by the Science Museum Group (SMG), the main aim being to realise the potential of their collection of energy production and distribution objects, hence the title. WPEHS was invited to send two representatives, Andrew Smith, Archivist and David Cousins, Curator to a ‘Workshop’, introducing the ‘Energy in Store’ project and changes afoot at the SMG Stored Collections.

The SMG includes the Science Museum, London, Museum of Science and Industry Museum, Manchester, National Science and Media Museum, Bradford, National Railway Museum York and Locomotion, Shildon together with a ‘large object’ storage facility at The National Collections Centre, Wroughton near Swindon and a ‘small object’ storage at Blyth House, West Kensington, London. This is a shared facility with the Victoria & Albert Museum and the British Museum; the building is owned by the Government and is due to be sold in the next few years. SMG will receive funds from the sale of the building that will be invested in new facilities at Wroughton. It was explained that this exercise will result in adopting an extensive use of bar-codes to identify and record objects, as well as including proper environmental controls for the improved curation of objects in storage.

The vast Group collection includes around 425,000 objects and a total of 7m items including books, archival records, photographs and other media. Around 75% of the stored material has not been catalogued or subjected to detailed health and safety tests (such as for asbestos, radiation or dangerous chemicals) and its viewing by the public is limited.

The project explored the constraints and opportunities regarding access, consultation and communication between the SMG and the volunteer heritage sector. The museum’s stored collections represent a vital resource for historical researchers now and in the future. The project is being funded by the Arts and Humanities Research Council and aims to ensure the collections are well understood and better used. There were representatives from a wide range of heritage organisations present. By engaging in research carried out by different groups it brings together engineers, model makers and inventors with their knowledge and practical skills. This is an-going project, which isn’t going to be sorted out by one seminar. All museums suffer from lack of space, a need for expertise in old methods of operating objects, sharing research, wide use of volunteers, and a need for adequate funds.

INCINERATION OR LANDFILL?

Arguments are raging across the country on which is better for the environment. There are 42 incinerators in the UK with six more under construction. The local authorities are being pressed by private companies wanting to build incinerators in their territory on the strength of generating electricity from waste. There are obvious advantages to local authorities of getting rid of non-recyclable waste, since they are running out of landfill sites, but there is opposition from neighbours of the proposed sites anticipating smells, not only from polluting chimney stacks but also from trucks delivering the waste to the site. The smoke pollution can include emissions of nitrogen oxide, heavy metal particles and dioxin.

So, may be landfill is better after all! It can be out of sight and out of mind, if it isn’t near any awkward neighbours. However, it can still harm the environment since after some years the waste decomposes and produces methane. Also, chemicals so produced can leach into streams. The methane can be extracted by covering the site and use it to generate electricity in smaller quantities than incinerators. What would you do if you were a politician.

HYPERLOOP TECHNOLOGY

Firms are getting together to pursue this technology as they see it as new transportation system of the future. It involves transporting a pod through a vacuum-packed tube at 760mph initially filled with goods; the idea being to move cargo at the speed of flight. Foster & Partners, Architects, are teaming up with Virgin Hyperloop One to develop this technology. The initial concept would be between London and Edinburgh, but it is more likely that shorter routes may be more successful. Is it “Pie in the Sky” or is it feasible?

PARNALL'S STILL FLYING!

Following my recent article about Parnalls, I have become aware of another branch that is still very much going. Parnall Engineering Advanced Limited (PEAL) is based in Cornwall. It was started by Mark Parnall, great grandson of founder John Parnall, and Mark's nephew Adam Parnall is very involved as Head of Estates. The aim of PEAL is to develop new talent through innovative engineering projects supported by inspiring trainers and mentors from the world of business. Young people are given the opportunity to develop skills and experience through internships, work experience, apprenticeships and employment at Trelock, a Cornish country estate.

Among other projects they are continuing the association with the aircraft industry by restoring two Spitfires, one to flying condition and one as a static exhibit. The flying example is a Mark Vb, serial number BL688 and civilian registration of G-CJWO. It was delivered in January 1942 and flown by various squadrons throughout its life until it met an unfortunate end on a hillside in Lancashire in May 1945. It was recovered by the RAF at that time and then again by the Lancashire Aircraft Investigation Team in 2006. The identity and some remains found their way to PEAL for subsequent restoration to flying condition, with the help of some of the major companies in Spitfire restorations providing parts and assistance.

The methods used in the construction of the static example are exactly as the flying one but incorporating some unserviceable and non-airworthy items, and it will serve as a skills workbench for the apprentices. It will have a fully fitted out cockpit with operable controls, and it will look identical to a flying Mark V Spitfire, but it will never fly. Other PEAL projects include the Marine Division, developing a hybrid inshore boat for silent cruising using innovative new design techniques; and the Innovation Division, which is exploring Virtual Reality and new materials for use in construction and design. The company's website can be found at www.parnall.net *Paul Hulbert*

DRAX POWER

A new man has taken the helm at Drax Power Station, the largest steam driven plant in the UK. He is Will Gardiner, he takes over from a well-known Dorothy Thompson, who ran the station for 12 years converting it from coal-fired to wood-chip burning fuel. Drax can generate up to 3.9 giga-watts of electricity supplying about 7% of the UK's electricity. Last year it received £730 million in subsidies relevant to its three biomass units and recently the Government has got less enthusiastic in subsidising biomass fuel. The plant still includes two coal-fires units and Mr Gardiner plans to convert them to gas-fired units with a large battery storage unit adjacent. He is also interested in carbon capture and the company recently announced plans for exploring the technology associated with capturing their carbon emissions to make the coal-fired units carbon neutral. Mr Gardiner is a keen marathon man – he will need to be to achieve all these objectives!!

WPEHS DATA PROTECTION POLICY

The General Data Processing Regulation (GDPR) came into force in 2018. The Society's Data Protection Policy defines how WPEHS will comply with the GDPR, and, what data is retained and processed by WPEHS, and for what purposes. This is a very short summary – the full Policy is on the WPEHS website, or a hard copy can be supplied on request.

Data held

WPEHS holds three types of data: Membership data, Event and Activity data, and Enquiry data.

The lawful basis for all this information being held and processed is "legitimate interests", i.e. to carry out Society activities, WPEHS "use people's data in ways they would reasonably expect, and which have a minimal privacy impact". WPEHS does not retain or process information that would require explicit consent under the GDPR. There is a common misapprehension that explicit consent is required for everything, but in fact it is only one of a range of options under GDPR.

Data is shared on a "need to know" basis - full membership data is only held by the Membership Secretary. Relevant data is shared with committee members organising events and dealing with enquiries. Data is retained in a password protected environment, for a maximum period of four years.

Subject access requests - reviewing, updating and deleting information

Members are asked to contact the Membership Secretary if they wish to review, update or delete their membership information, or to contact the responsible committee member direct regarding events, activities or enquiries information. On receipt of a member's request the Membership Secretary or other relevant committee member will provide a copy of the relevant data electronically and in a commonly used format.

Data protection responsibility

Data protection responsibility rests with the Membership Secretary on behalf of the committee. If any person has reason to suspect a data breach they should notify the Membership Secretary or the Chairman, who will arrange for investigation and appropriate action.

Paul Hulbert, Membership Secretary

JCB ELECTRIC DIGGER

JCB has developed its first ever electric digger in response to customer demands for a zero emissions machine which can work indoors, underground and close to people in urban areas. The 1.9 tonne mini excavator can be charged by simply plugging it into a standard 230-volt domestic electricity supply. Once fully charged, it is ready to put in a full normal working day on the building site – digging with the same speed and power as its diesel counterpart. Super-fast charging will also be available at launch, slashing the charging time in half. The innovative product goes on sale at the end of year after being developed in secret at the company's Staffordshire HQ.

BRUNEL'S BROADBAND

The Clifton Suspension Bridge is being used to provide super-fast internet to some of the hardest-to-reach areas in Bristol. Cables are being laid underneath the historic bridge as part of a project to deploy a 1Gbps Fibre-to-the-Home (FTTP/H) broadband network to 53,000 premises in Devon and Somerset. Abbots Leigh will be one of the first areas to benefit from the new cables. Taking the direct route across the bridge will avoid a lot of disruption to local roads and traffic. Meanwhile in another part of the project, the traditional high-banked Devon lanes are proving to be a problem. It is reported that in some places in the Blackdown Hills the contractors have cut into the base of the bank to lay the conduit, as opposed to excavating a narrow trench in the tarmac. Local people are concerned that rainwater runoff could erode the backfill and expose the conduit to damage by passing tractors.

UKRAINE DNIEPER HYDRO-STATION

Having just returned from a river cruise in the Ukraine, being the 549 miles Odessa to Kiev including the sea portion, the Dnieper River had five locks raising the ships 270 feet. The fourth lock was at Kremenchugskaya where there was also a hydro-electric power station. Regrettably a visit was not on the schedule, but certain information was available.

It seems that in 1921 Lenin proposed a five-year economic policy and in his first plan a hydro-electric scheme was proposed, and construction began in 1927. An American, Hugh Cooper had built such schemes throughout the world and was made Chief Consulting Engineer resulting in nearly 70% of the materials being American. Five of the nine massive generators were built by General Electric (apparently the builder's plates were later covered over). Nine 85,000 horse power turbines were built by the Newport News Shipbuilding and Dry Dock Company, with construction steel, hoists, locomotives etc all coming from America.

At the ceremonies dedicating the station in 1932 Hugh Cooper was awarded the highest honour, The Order of the Red Star. Following the German invasion of the Soviet Union, the station was dynamited in 1941 by retreating German troops. The plant was eventually rebuilt between 1944 and 1949. *Graham Warburton.*

BOOK REVIEW "EXMOOR CARPENTERS" by Graham Wills - ISBN 978-1-5272-2175-8

The book records the diverse work of six of the twenty or, so carpenters employed on the Exmoor Estate in the nineteenth and twentieth centuries. Of interest is the Chapter on James Welsh (1863-1938) and appendix *Notes on James Welch's Daybook*. James was the Estate Carpenter at Simonsbath from 1892 until 1911. On the death of Sir Frederick Knight (1897) the estate passed to Viscount Ebrington and his vision was instrumental in improving the estate, replacing the old water wheel at the saw mill with a Francis turbine and extensions to accommodate dynamo and battery rooms (1898).

The turbine continued in operation until flooding in 1952 enforced the installation of a diesel engine, which powered the dynamo until *mains* arrived in 1962. James's daybook details the range of tasks, including maintaining and operating the plant. Several payments to Edmundsons Electricity Corporation Ltd. appear in the Estate accounts, one in July 1911 of £1 8s 2d for testing etc. by Mr Garnet. James left Simonsbath in November 1911 moving to Braunton Electric Light and Power Company, where he helped build the engine house and install the plant. Exmoor National Park installed a new generator at Simonsbath in 2002/3 utilising the existing turbine, shafts and belts - which still power the saw mill on open days. Graham Will's 162-page paperback is a painstaking study and affords us fresh insight into the people involved at the birth of our industry. *Barrie Phillips*

ELECTRIC MOTORBIKE

When attending a vintage vehicle show in Frenchay I noticed folk gathered around a modern, and somewhat out of place motorcycle. On inspection, this was an *electric motorcycle*, a Zero DS ZF 14.4 made in California. The young owner stated that it has a range of around 200 miles and although he had only owned it a short time had already used it for trips to London and Bournemouth. He added that the motor delivers a high torque through the rev. range, and consequently the drive does not need a conventional gearbox. He further added that it offers a sport mode but did not use it because it is a "bit too lively!" *Ken Brooks*



The American Electric Motorcycle

CAIRNS ROAD

There has been plenty of activity at Cairns Road premises recently, what with Western Power arranging to have the large Lime trees pollarded. The site certainly looks different. Also, we welcomed a group from Yate, Friends of Yate Heritage Centre recently with Paul Hulbert giving them a film show and others providing coffee and biscuits. They were very appreciative and generous with their donations.

David Cousins and Paul Hulbert have also taken a slide show "Bristol Memories" to a local elderly people's home, who wanted something that would stimulate residents' memories. There was an audience of about 30, who engaged with the interactive talk and enjoyed handling a range of exhibits from the Museum.

FRACKING – WILL IT, WON'T IT?

The company, behind the first attempt at fracking in Britain since 2011, is Cuadrilla, a private equity-backed shale gas explorer. They are hoping for a much smoother ride this time, since they have official permission to frack the first of two wells at its Preston New Road site. They have considerable opposition from environmentalists. Up to now the protesters have tried to trespass the site and have been fined with 350 arrests and an 80% conviction rate. With such great opposition, one wonders if the process will happen.

RUSSIA'S ARCTIC NUCLEAR

Russia is intent on being a major player in the World these days and are intent on maintaining a presence in the Arctic Region, since their borders front that northern territory. To supply electricity to this remote region, they are planning a waterborne nuclear power plant which will be towed to Pevek, a port in the remote Chukotka Region. It is the first floating station of its kind and will have two 35 MW nuclear reactors. It was to be initiated and tested in St. Petersburg, but after complaints from the Baltic States has been moved to Murmansk. The plant will then be towed 300 miles to Pevek by tugs next year along the Northern Sea Route. It sounds hazardous!!

OTHER NUCLEAR SITES

In the last issue we mentioned a South Korean firm wishing to build a nuclear station at Moorside Cumbria. There doesn't seem any shortage of foreign firms wishing to build nuclear in the UK. Now we have Hitachi wishing to build one in Anglesey. The Japanese firm has spent £2 billion so far on its Horizon Project, which is developing plans for a new 2.9gigawatt nuclear station at Wylfa, and an executive of the firm has had a meeting with the Prime Minister during May to discuss financial support from the Government. The £15 billion project hinges on a deal involving the Government taking an equity stake alongside the Hitachi and the Japanese Government, since the latter are keen to get back into the Nuclear business after the Fukushima disaster. UK Ministers are keen to agree less onerous terms than Hinkley project involving a 35-year guarantee payments system per MWh for energy. The British Government's proposals are secret at this moment.

All that and it doesn't include China's intentions with their large Government backed concern, China General Nuclear (CGN) of securing a site in Britain, mainly at Bradwell B station in Essex and also wishing to assist EDF with their site at Sizewell C in Suffolk. However Nuclear pundits are saying that the Government doesn't need more than two Nuclear stations operating in the UK. Who will win this battle?

COBALT MINING

One wouldn't think that this topic would have much to do with electricity, but suddenly its news. It seems that Cobalt is used in electronics like smartphones and laptops, but more especially is a key component in Lithium-ion Batteries, accounting for 20% of the

material necessary for the cathodes. With electric cars sales increasing, a greater increase has been witnessed in Cobalt Mining. Most Cobalt producing mines are in the Democratic Republic of Congo (DRC), where 52% of the World's reserves lie, which does include Zambia along the African Copper belt. Unfortunately, the DRC is politically insecure, so everyone is looking elsewhere, although the Chinese are snapping up all available supplies. It's a cut-throat business!!

TESLA MODEL 3

The basic Model 3 was released onto the US market last year at a cost of \$35,000, however the better performance Tesla 3 costs \$78,000 with all options included. Although 31,000 cars have been produced at a rate of 3,500 a week, production targets have been pushed back due to problems. One of these has been highlighted by consumer groups that the stopping distance 152ft from 60mph was far worse than any contemporary car. However, the boss Elon Musk is not worried since he claims that the complaints are exaggerated.

TEVVA MOTORS

An entrepreneur Asher Bennett has set up a company Tevva Motors in Chelmsford to make all-electric trucks. Asher moved to Britain from Israel in 2012, where he had operated a company called Evida Power which has folded up. Whilst everyone is concentrating on electric cars, he feels there is a need to provide for a possible need of electric lorries. The vehicle (pictured), he has built as a hybrid really with a diesel or petrol range extender engine for longer journeys. He has 40 employees so far, many available from Ford's plant at Brentwood nearby and is seeking finance to expand. Let's hope he succeeds!



CHINESE SOLAR ROAD

A Chinese company is experimenting with a road paved with solar panels. The company, Qilo Transportation Development Group claims to be the first, but I know I have reported the French constructing something similar and we have heard no more! The Netherlands have tried solar panels embedded in pavements, so what's it all about. The Chinese want to be leaders in the field of Renewable Energy and have installed electro-magnetic induction coils in the side pavements to provide in the future car charging wirelessly whilst being driven along the road. The only problem experienced with these roads is that can't endure heavy traffic.

MEMBER FEEDBACK

Member Ted Clapton has written the following: - "I have just received the December newsletter. I am always impressed by the depth of knowledge on generation and distribution matters that are not featured in the press; this includes the Guardian, which I read daily. Thank you to all the contributors! Our local environmental group (Greener Teign) recently organised a trip to Hinkley Point B and C. It was very interesting, but I related more to the now-closed Hinkley Point A Magnox station. I was an engineer on the construction of Trawsfynydd Magnox station in 1961-64, now history! We live in rural Bridford on the east side of Dartmoor; EoN is our supplier. Recently, EoN wanted to fit a smart meter to replace our dial meter, which was probably fitted around 1956 when mains electricity arrived here. The fitter came, no electronic signal so we still have our dial meter. I e-mail our meter reading regularly to EoN and I do not feel any lack of control!"

Ed: *Thanks Ted. What are member's experiences with smart meters? Do you find them helpful, or have you given up?*

NEW MEMBERS

We are pleased to welcome two new members :-

John Howard lives in Chipping Sodbury, and worked in engineering companies in the Midlands and Bristol.

James Reckhouse lives in Somerset and has a background in both electrical engineering and water and environmental management.

MEMBERS NEWS

Peter Lamb has had major surgery and is recovering well. Also he has downsized to a bungalow. See below.

PYLONS AND THE WEB

Transmission towers they may be to the cognoscenti, but as far as popular usage goes, including unexpected enthusiasm on the Internet, pylons it is. Members may well know of the Websites in question, "Pylon Appreciation Society" (PAS), but in case some of us do not, herewith a few leads. Try 'Pylon of the Month' for starters. It bears a mass of interesting information and a gallery of fine photographs. The April 2018 choice was in our territory, the Severn powerline crossing at Aust, the UK's longest span.

The PAS used to run a standard website, but this seems to have gravitated to Facebook. However, much of its rich store of illustrations and data can be found on gorge.org scroll to 'Electricity pylons' and look out for 'Designs' to discover a full categorisation of towers - useful for sharpening the observation powers of younger relations. There are many other leads, for example via Wikipedia. And look out for a *Guardian* article of great erudition, 'The Gaunt Skeletal Beauty of Pylons' by Jonathan Glancey, 26 March 2009, which explores what literature and the arts have made of the pylons.

Commentators like to affect wonder and bewilderment at their discovery that anyone should take an interest in

these controversial yet eminently important structures. But, as Louis Armstrong said of jazz: 'If you've got to ask, you'll never know.' **Roger Hennessey**

A "PAIR OF TROUSERS"?

Did people ever wear a single trouser on one leg? The answer was given by Susie Dent in the *Radio Times*. Trousers in the 16th century looked different from the ones we wear today. They consisted of separate coverings for each thigh, which were belted at the waist and had stockings attached. These two-piece garments were known as "trouse" or "trews", from the Irish *triubhas*. The "s" ending always suggested a plural, but as there were two components they came to be seen as a pair - just like "drawers", which were originally stockings.

Other two-pronged items also now invite a plural form, such as "tweezers". Early binoculars, meanwhile, consisted of two telescopes bolted together, a history we've kept when we talk of a "pair of binoculars" - even though "binocular" means "using two eyes".

So now you know! **David Hutton**

CAR CHARGING

The Government is considering changing the building regulations to include car charging points in new house builds. Chris Grayling, Transport Secretary announced this recently together with measures to explore the wireless charging technology. £400 million is to be spent financing companies who explore these technologies, which may include providing charging points at street lamps, where there is an abundance of on-street parking.



FOR YOUR DIARIES 2018/2019

Fri 5th Mon 8th Oct. BLETCHLEY PARK W/E
Sat 17th Nov. TALK "THE CATHEDRAL YARD
FIRE & EXETER'S HISTORIC BUILDINGS"

by Dr Todd Grey after lunch at the Nutwell Lodge.

Sat. 9th February - WINTER LUNCH at Batch Country Hotel, Weston-super-Mare, speaker Pat Hase on "A Weston-super-Mare/Bristol Holiday in 1836".

NEXT EDITION -

This newsletter is produced every four months. Please send articles, photographs etc to: - Peter Lamb at 1 Fairfield Way, Backwell, Bristol BS48 3RQ Telephone 01275 463160 or e-mail him on lambpandv@btinternet.com.