

# HISTELEC NEWS

NEWSLETTER OF THE SOUTH WESTERN ELECTRICITY HISTORICAL SOCIETY

No. 19

DECEMBER 2001

## HAPPY NEW YEAR TO ONE AND ALL

By the time you read this, you will have devoured your Christmas turkey. We hope you will have had an enjoyable time and ready for the Annual Lunch.

## SPECIAL GENERAL MEETING

The special general meeting being tacked onto the talk by the Clifton Suspension Bridge Bridge-master was very well attended with 31 members and 18 guests. The meeting was called to consider new rules in order to satisfy the Charity Commissioners. Two members of the executive committee, John Gale and Roger Hughes, had compiled the new rules.

A lively debate ensued, but eventually the new rules were approved with a further clause being added regards the Archives and the Museum Artefacts. The next move will be to make a specific application in order to convert to a charity.

## CAIRNS ROAD VISITOR CENTRE

Wow, can you believe it, work has started on converting the second switch-room at Cairns Road into accommodation as a Visitor Centre. This is with the initial instalment from WPD of £2,500 to make the second room habitable with a solid floor and access to the toilets. It may be possible to start decorating the room in the new year with a members' working party.

## SOUTH SUB-COMMITTEE

Roger Christy has intimated that he will not be standing as Chairman of the Sub-Committee at the AGM in March, so we will be seeking a new leader of the South group. Any offers? The new chairman will need to have ideas on speakers and venues in Devon & Cornwall for the year 2003. Yes, one has to plan well ahead.

## WEEKEND AWAY 2003

The committee were astounded by the choice by those present at the Snowdonia Weekend to go next time to Northumbria. Also the voting was a bit suspect, since we had more ticks in total than people present, funny how did that happen!! It is considered to be too far from the South West. The choices are to be given a rethink and the membership will be consulted.

## HAVE A GO !!

### CROSS NUMBER PRIZE COMPETITION

We were disappointed that only one person had a go, June Hield submitted an answer to the Cross Number competition compiled by John Haynes. She had one minor mistake, but we decided to give her the prize. A bottle was presented to her at the Snowdonia Weekend.

Well done, June. Congratulations on your enthusiasm and support, which is much appreciated.

## COLYTON ELECTRICITY SUPPLY

In the last newsletter, I mentioned some electricity undertakings in the South West, for which we have no details. Surprise, surprise, I have found some information about Colyton. It was a non-statutory undertaking and was not taken over at nationalization, since it was a DC supply. It was not absorbed into SWEB until December 1951, when an 11kV line was brought into the town and everyone was converted to AC. Consumers were not given any compensation for unsuitable appliances. Incidentally also the Scilly Isles weren't taken over until 1957.

## COLIN HILL'S MUSINGS

I read the report on your trip to Hinkley Point Power Station with some sadness. It only seems like yesterday that we were running up the 93.5 MW turbines for the first time. And now it's all finished!

Also he goes on :- I recently visited my first training base station, Wakefield "B" and it was completely gone. Apart from some concrete bases and a few rusty signs, it is rapidly reverting to nature with lots of bird life and swans on the river. When I joined the industry, it was still being built and I had to be allocated to Thornhill Power Station, a very old Yorkshire Electric Power Co. Station. The staff there felt that they were not really part of BEA then. However the Thornhill site survives as a PowerGen 50MW GT Station, which has recently been built there. We now receive our domestic supplies by overhead line from Thornhill on former YEP Co. lines supported on steel "I" beams. They look as though they will last forever.

*Colin Hill*

## ENIGMA FILM

Following our trip to Bletchley Park this year and the April's article on the subject, some of you may have ventured to see the film "Enigma". You may have been surprised that they did not use the Bletchley Park Mansion, another house nearby, Chichley Hall, was used as a substitute. I am most intrigued, it is strange thing to do, I wonder why?

## FALKIRK WHEEL

Another piece of splendid industrial architecture has been erected in Scotland. When we were in Ironbridge we saw something similar, an inclined plane. A device for moving canal barges from one level to the next. The Falkirk Wheel is the world's first rotating boat lift costing £78million, which is part of the millennium project to link the Forth & Clyde and the Union canals between Glasgow and Edinburgh.



**Falkirk Wheel**

## TOURIST TIME MACHINE

*Paul & Margaret Hulbert recently visited Mallorca, and travelled on a fascinating railway and tramway.*

The town of Sóller on the northern coast of Mallorca used to be isolated from the rest of the island by the mountains. To transport agricultural produce from Sóller to the markets of Palma it had to be transported over the Sierra de Alfàbia mountain range by cart or shipped round the island by sea from Puerto de Sóller.

A bold project was begun to build a narrow-gauge (3 ft) railway some 27 km in length from Palma to Soller. Thirteen tunnels were needed and an impressive five-arch viaduct had to be constructed. The track curves back on itself within the mountain to lose height, and even the initial survey must have been a serious undertaking.

Work began in 1907 from both ends of the line. The workers at the Palma end were aided by a small locomotive, called Maria Luisa, but at the Soller end they only had mules. Many villagers would not believe that the two groups would really meet. But despite local scepticism, the tunnels met in 1911. Services began on the 16th April 1912, the day after the Titanic sank. A 3ft gauge electric tramway from Soller to Puerto de Soller was opened the following year.

In 1929 the main line was converted to electric traction. The original wooden-clad rolling stock is still in use - if you travelled first class you had a quilted seat, but second-class passengers had to sit on wood.

By the 1930s the train and the tramway had already started to become a tourist attraction, and now they are one of the most popular excursions on Mallorca. They offer spectacular views of the mountains, a chance to travel through the orange and lemon groves (you can actually smell the fruit as you go through) and the opportunity to visit an historic town and a charming Mediterranean port. **Paul Hulbert**

## SEATON TRAM REVIEW

Saturday September 29 saw 39 intrepid souls gather at the Harbour Inn Axmouth for lunch. It was a glorious warm sunny day and many sat out in the pub garden and were entertained by the various dogs, cats, doves, pigeons and other people. It was also a chance to catch up with former colleagues.

Then a short drive to Seaton to board our reserved open top double deck tramcar for the 25 minute ride alongside the river Axe to Colyton. Am I getting fatter or are the doorways, stairs & seats on these trams narrower than normal?!!!

We saw lots of birds feeding on the mudflats. They were supposed to be Oystercatcher, Curlew, Egret, but mostly just plain seagull. At the Colyton terminus many opted for a relaxing sit down and an excellent cream tea before the return journey, others set out to find souvenirs or technical details about the tramway in the gift shop. I heard a voice say "I want a-wiring-diagram".

We then boarded the tram for the return journey. Those on top on the way out were now below as is fair and just. We stopped off at the Riverside Depot near Seaton and not open to the public, for a conducted tour of the premises and a close-up look at the wide variety of trams and maintenance equipment there. We learned that it is a flourishing and expanding business with plans for three new open topped all-purpose trams to be the mainstay of the fleet. The older trams some of which date back to 1904 will be rested more and used for peak lopping. We also learned that the system was 110v DC with the overhead conductor +ve and the rails the return. The wiring diagram should not be a complex thing.

The sun continued to shine brightly as we waited for an up tram to deliver the baton that we had to hold before we could proceed down to Seaton. After a short walk back to the car I was relieved to find that I could fit quite easily through the door & in the seat. Not getting fatter after all - great. A really excellent day, good food, good trip, good weather. Thanks to the organisers for a splendid effort. **Brian Byng**

## SNOWDONIA WEEKEND REVIEW

Over the weekend of 20/21 October, 59 members and guests of the Society assembled at the Royal Victoria Hotel at Llanberis for a memorable short holiday amongst the mountains of Wales. The journey to Llanberis was not helped by heavy rain and most of us arrived as the sun broke through. The only exception was one couple, who naturally shall remain nameless, who relied on their PC for the choice of route, which took them a long route along the North Wales coast road - the "Great Way Round" or GWR to the railway buffs.

After dinner on Friday Evening, we were given an illustrated talk on National Trust in Wales by the Trust's Director for Wales. He showed us a wide range of properties and sites, ranging from Erddig in the North to the Brecon Beacons in the South, whetting our appetites to use our NT membership. We retired with great expectations for the weekend.

Overnight there was more heavy rain and Saturday dawned dull and cloudy, but by the time our coach (and minibus for the overflow) reached Portmeirion, the sun had broken through. The setting of the Italianate village looked wonderful with the tide in and everything dripping from the overnight rain. The view over the Glaslyn estuary from the village was superb with some lovely walks through the woods overlooking the sea. The village was the brainchild of the architect Clough Williams -Ellis and built in the 1920's. When my wife and I visited it 30 years ago, we were disappointed in the shabby appearance of the village, but today his successors have been able to add to and restore the original site.

In the afternoon we were taken to Porthmadog, the home of the Ffestiniog Railway. A trip on the Ffestiniog is a must for all railway buffs! The railway is a genuine bit of our industrial history having been opened in 1836 to bring slate down from the quarries around Blaenau Ffestiniog for shipment to the growing industrial towns in Britain. One of the main interests is the unusual locomotives, which were built for the line, being effectively two 0-4-0 locomotives made back to back with a central "footplate", patented by an engineer by the name of Fairlie. Now diesel locomotives are used for some of the trains but we were privileged to be hauled by one of the "double" locomotives being oil-fired rather than coal. The journey up the 13 mile line was spectacular with wonderful views across the Vale of Ffestiniog to the now closed Trawsfynydd Power Station. We had reserved carriages, whose doors were locked before we left Porthmadog! With the extremely limited clearances between the carriages and the sides of the cuttings, you understood why.

We were met at Blaenau Ffestiniog by our coaches and taken down to Bettws-y-Coed where we were free to explore, find a cup of tea, or whatever for the

rest of the afternoon. Again the railway fanatics found a delightful model railway museum. Then back to Llanberis via Capel Curig with a photo stop by Llynau Mymbyr. With the clear sky we could see the summit of Snowdon in the surrounding hills.

After dinner we had an illustrated talk by Bill Williams, who many will remember from his time in the South Western Region, CEGB. Bill started by telling us of the first job he was given on his arrival on the site as an Electrical Engineer - to assess the tenders for the Site catering contract; clearly a case of turning your hand to anything! He gave a fascinating account of stages in the construction of the pumped storage plant from the reasons for its adoption through to commissioning. Inevitably it was the civil engineering aspects that were paramount. When we reached the questions, there was clearly going to be no end to the discussion. One by one the non-technical members quietly slipped out to find their beds or otherwise. It was midnight before Bill & his wife, Ann, left with our thanks for a challenging evening!

Sunday morning we assembled at the Dinorwig Visitors Centre, built by the CEGB but now owned and run by Edison Mission Energy. We were split into two groups one non-technical and the other the rest. Two of the Station Guides gave us an audio-visual presentation on the Station and we then boarded a couple of the site buses for an underground tour. The "rest" were accompanied by Bill Williams, as well as the official station guide. Like all major power stations the scale of things is impressive - with being 65 metres below the lower lake, and when in the valve gallery told it took 10 seconds to achieve full load. It was with reluctance that the "rest" tore themselves away from the Control Room.

Sunday afternoon we were free to follow our own devices, some tried for the Snowdon Mountain Railway but being the half-term weekend all trains were fully booked. Others visited the excellent slate museum adjacent to the Power Station, or rode on the Llanberis Lake Railway. Before dinner we were entertained to one of the quiz's that is an integral part of a SWEHS weekend. Chris Buck was an excellent Quizmaster, assisted by John Coneybeare. Chris's word was to be final, with difficulty, when it came to a round on the Highway Code. Colin Hill brought a selection of artefacts connected with Electricity to set us all guessing - a truly remarkable collection.

Well that was it. On Monday, another beautifully fine day, a group achieved their ambition of going up Snowdon on the mountain railway (*see separate story*). I went to the Llechwedd Slate Caverns at Blaenau Ffestiniog. All in all an excellent weekend. Chris Buck and David Hutton are to be congratulated organising it for us in such a professional way.

*Roger Hughes*

## **REVIEW - CLIFTON SUSPENSION BRIDGE VISIT & TALK**

On Saturday 24th November some fifty members and guests met at the Clifton Suspension Bridge visitors Centre. Due to the large number, we split into two groups in order to view the exhibition and be taken on a tour of the bridge.

The exhibition in the Visitors Centre outlined the story of how the bridge became into being. In 1754 a prosperous wine merchant William Vick left £1,000 to be invested until it became £10,000, when it was to be used to build a stone bridge across the Avon Gorge. There were 2 competitions to design the bridge, the first being won by Thomas Telford, who had already built the Menai and Conwy Bridges, however his design was set aside in view of cost. A second competition was then held, which Isambard Kingdom Brunel eventually won. The building of the bridge was a slow erratic process and it was in fact Brunel's death that inspired the Institution of Civil Engineers to complete the bridge in his memory.

Our tour of the bridge was conducted by John Mitchell, the Bridge Master. We were first shown the weighbridge strip across the road, which effectively weighs each vehicle on approach to the bridge and raises an alarm should any vehicles be overweight. Then we moved on to view the bridge anchorage through a manhole (I wonder what passing motorists thought of some 25 people looking into the hole). The tour concluded after viewing the towers and walking part way across the bridge.

Following lunch at the Rudleigh Inn, John Mitchell gave an illustrated presentation on the history, construction and maintenance of the Bridge. Thanks go to Chris Buck for arranging an interesting and enjoyable day.

*Clive Goodman*

## **FOURTEEN WENT UP IN THE WORLD!**

On a clear, bright and sunny chilly morning, Fourteen "Snowdonia Explorers" took the 10am train on Monday 22nd October to the summit of Snowdon.

We practically took over one of the two carriages of the train. Members of the public were "entertained" by the banter of some of the "Swebbies." No doubt, they told their friends and families about those "crazy" people they encountered on the train!

The scenery on the way was stunning. Waterfalls, lakes, sheer rock faces, houses that seemed to be in the middle of nowhere, remains of buildings which probably were shelters for the shepherds and of course sheep! Several people were taking advantage of the sunny day to walk up the mountain, whilst others were just watching the trains go by. As is usual we waved to the walkers and they waved back.

As we reached the summit, we had a breathtaking view out over a cloud-covered Irish Sea towards a few solitary peaks - the Isle of Man and a part of Ireland.

On reaching the summit station there stood a solitary sheep, who enjoyed being made a fuss of, but when it saw someone open a bag and take out what appeared to be food it sprinted over to them hoping they would take pity on it - they did! The actual summit of Snowdon is behind the station building approx. 20 metres above the station platform. At the top there is an Orientation Table where we confirmed that what we could see earlier in the far distance was a part of Ireland, in fact it was the Wicklow Mountains. The view from the summit was spectacular.

All too soon, it was time to board the train for the descent. Brian & Gill Byng and John Coneybeare, who were all wearing the appropriate footwear, left about 10mins before the train departed to walk down the mountain. We caught a glimpse of them in the distance tramping along a ridge as we descended. As we came down, a steam-hauled train was making its way up the mountain, quite an amazing sight.

Before meeting with our fellow "explorers," Paul and I were in the village when an elderly gentleman spoke to us. He told us that he used to be a guard on the Snowdon railway, and said, at the top of the mountain is a bar/café, and that the bar man is the "highest paid barman in the country." Some people apparently think that it is true, and ask what salary he earns!

All in all, it was an experience to remember. Well worth the time. We would have liked to stay longer to take in all the views, but we had to catch the train back down 30mins after we arrived, in case the weather closed in and there were no spaces left on the next train. It's a long long walk down.

Snowdon Railway was opened in 1896. It is the only rack and pinion railway in Britain. The trains cover the 4.6 miles to the summit in approximately an hour. The loco runs chimney first up the mountain pushing the coach in front. If you look carefully at the steam locos you will see that their boilers are not horizontal - they slope so that the water is level, when it's going uphill! The height to the summit is 1085 metres or 3560 feet.

*Margaret Hulbert*

## **ELECTRICITY DISTRIBUTION IN CANADA**

In May I enjoyed two weeks in Western Canada starting in Vancouver and ending in the Rockies. Being an ex electricity industry engineer, it was inevitable that I took notice of the North American distribution practices - indeed it was hard not to notice their distribution system - more often than not you couldn't fail to see it!

### **Electricity Distribution in Canada continued -**

In Vancouver in particular behind every city street you would find an alleyway, I think they called them "Commercial Lanes" just about wide enough for two cars to pass, acting as a service road to the shops, offices and hotels. Water, drainage and gas were underground but about everything else was overhead.

The supports were enormous 'H' frames made up from roughly hewn timbers about three or four stories high with three or four timber or steel cross beams. Most of the poles bore scars from repeated arguments with passing lorries. The top beam carried the MV three phase system - probably at about 10kv judging by the insulators used. The next beam down carried the transformers with no evidence of any form of fusing or isolation facilities. Transformers seemed to be universally single phase in round tanks with a single 120v LV winding connected as a three phase group feeding, again with no evidence of any fuses, the three phase four wire system carried on the next deck down!

The lowest level appeared dedicated to the telephone/cable TV distribution system - the whole edifice seemed a maintenance access nightmare. With the low LV distribution voltage practically every H pole had a set of transformers. Clearly larger blocks had a MV connection with a cable connection directly connected to the overhead line.



**Vancouver side-street**

Once away from the towns the distribution system settled down to a single phase to earth line, again guessed as being at about 10kV running along the roadside with pole mounted transformers at frequent intervals but his time with a 120-0-120V three wire LV systems. What was interesting was that the MV neutral/earth wire was also the LV neutral - once again there was no evidence of any isolation facilities

or fuses! On one estate I walked through, I estimated that an individual transformer fed about four houses.

The telephone distribution system was no better. I don't think their telephone industry knows what undergrounding means and every main road was set off by a row of massive poles carrying three or four hefty telephone cables. When it came to a road junction the tee-off connection would be hung mid-span over the middle of the road junction. I think this explains the shock that some of the American cable TV companies found, when they bought British companies and had to bury their networks!

Amenity seems to count for less in North America than here and as the Canadians appear to be reasonable amenity conscious, I suspect that we need to keep a close watch on the introduction of American practice here. The photograph is a super example taken from the back streets of Vancouver.

For the railway buffs amongst us the contrast between Canadian and British railways couldn't be more marked. At Jasper, for example there was a thrice weekly train to Vancouver and another on the other three days to Edmonton! Freight on the other hand was intense with enormous trains. At a lunch stop by the Fraser river we were passed by an east bound freight with three diesel electric locomotives at the front and another mid-train. We counted 151 bogie wagons in the train and one of the party estimated that the train was nearly two miles long. Certainly it weighed in at something like 7500 tonnes excluding the locomotives.

As most of the railway system is single track, the freight trains run in flights with three or four east bound trains followed by three or four west bound. This made yards like the one at Jasper interesting as they collected six or more trains together before they set off behind each other, a "glorified" passing place.

West bound the cargo is grain, eastbound timber, and timber products and containers both ways - the latter stacked two high, with a 60' container balanced on top of a shorter 40' one. Speed was not high - probably about 40-50 mph. The rail commuter service into Vancouver from the Fraser Valley was particularly fascinating. Something like ten trains ran into Vancouver in the morning, parked all day, and then took their commuters home in the evening. Meanwhile during the day the rail system was given over to shunting grain wagons - hundreds of them!

***Roger Hughes***

### **OVERHEARD**

In the Archers by Eddie Grundy "You could run the National Grid off that smile".

New European Directive :- The sign "WC" is to be replaced by the words "EURONATION"!!

### **EXTRACT FROM THE ARCHIVES**

*From Stanley Steward's booklet on 25 Year's of South Western Electricity:-*

A light hearted, but significant example (of good humour) occurred in 1951 when, before presenting the Annual Report, the Chairman told the press that, though a printer's error, the Board had advertised for a "short-horn Typist" and had received a reply, which purported to come from a cow at "Much Munching, Chew Magna", in which the applicant claimed a "Pitman certificate for 120 squirts a minute"! It was this story, and not the increase in tariffs, which received prominence in every paper the next day. *(They "buried" bad news even in those days. Ed.)*

### **MEMBERS NEWS**

DAVID LANE – He's still working and recently gave a talk to the Exmoor Society, at which excerpts from the film/video "Power Comes to Widecombe" were shown. He used material from the archives about rural development on Exmoor. He is leaving WPD to do consultancy work for EASL. His wife, Mary will also be going "private" doing holistic therapy. Best wishes from us all. They are naming themselves "Clear Energy". New e-mail address [David@clearenergy.co.uk](mailto:David@clearenergy.co.uk)

### **A PINT A DAY KEEPS INCHES AT BAY!**

So claims Prof. David Williams of University of Wales, Cardiff. He says that beer has been unfairly blamed for increasing the girth of generations of drinkers. The merits of beer have been missed, because of its association with pot-bellied men. He says that beer is a complete food and its health benefits outweigh its dangers. The evidence was that those, who drink in moderation, live longer!! He said that the problem lies with the fact that alcohol numbs your stomach such that you cannot always tell when it is full. *(Ed. Tell that to your wife!)*

### **CHRISTMAS CRACKERS**

Why did the baker get an electric shock?

### **THOUGHTS OF AN OLDER PERSON**

Everything is further away than it used to be. It's twice as far to the corner and I notice they've added a hill. I have given up running for the bus, it leaves the stop faster than it used to. It seems to me that steps are steeper than they were in the old days. And have you noticed the smaller print in the newspapers and telephone books? There is no point in asking anyone to read aloud – everyone speaks in such a low voice, I can hardly hear them! Even people are changing; they are much younger than they used to be when I was their age. On the other hand, people my own age are so much older than I am. I chanced to meet some old friends the other day and they had aged so much that they didn't recognise me! I was thinking about them as I was combing my hair this morning, and in doing so I glanced at my reflection and would you believe it, they don't make good mirrors like they used to!

*submitted by Barrie Phillips*

### **CREDITON LINE 150<sup>th</sup> ANNIVERSARY**

Anyone go on the special steam train from Exeter to Crediton in May this year? If you did, please write and tell us about it.

### **MEMORIES**

You are invited to put pen to paper and write the highlights of your working life in the electricity supply industry for posterity to be published in this newsletter not more than 400 words. Here is a challenge to anyone ex-ESI, who may feel that they have an interesting tale to tell. Go on write it down.

### **NEXT EDITION**

This newsletter is produced every four months depending upon material available. Please send information, articles, photographs or letters to :- Peter Lamb at 35 Station Road, Backwell, Bristol BS48 3NH or telephone him on 01275 463160 Or e-mail him on [lambpandv@talk21.com](mailto:lambpandv@talk21.com)

**Answer:** Because he stood on a bun and the currant ran up his leg!