

Bygone Days

Metropolitan Vickers to Manchester Grid Control Area 1942 to 1983 By Len Simpson



Len Writes: - I was born in Birkenhead on the Wirral (now Merseyside) in 1927. I was lucky enough to enjoy two play areas – Birkenhead Park, which was designed and built by Sir Joseph Paxton – and inspired Central Park, New York, and Bidston Hill, which still has a windmill, disused lighthouse and Bidston Observatory, which calculated tide times and heights all over the world (prior to computers).

Birkenhead Electricity Supply was direct current and remained in some places until Nationalisation in 1948. My father charged radio accumulators (batteries) for people and also repaired various electrical items, which interested me.

The family left Birkenhead for Manchester in May 1939, and I went to Didsbury Central School, which was around the corner from the Manchester Grid Control Room. I was evacuated to Blackpool in the early part of WW2 – until air raid shelters were built at my school. In August 1940, at the age of 13, I moved to Openshaw Junior Technical School, (known affectionally as Old Joe's Tripe Shop, after the initials) after passing their exams. During my first year we attended the workshops a full half day a week and in the second year we attended two half days a week. We were taught woodwork, metalwork, engineering drawing, blacksmithing, and forging, making moulds from our woodwork and heating and pouring metal into the moulds. During the time we spent in the workshop some of the army personnel were also being taught metalwork.

I left school in July 1942 and in August started my Trade Apprenticeship at Metropolitan Vickers in Manchester, as an Electrical Fitter. We worked from

07.30 until 17.00, Monday to Friday, with an hour off for lunch, and 07.30 to 12.00 noon on Saturday. We moved round various departments for our training, and spent half a day a week attending their school at Stretford Technical College. From September 1942 I attended night school three nights a week from 18.30 to 21.00 to obtain professional qualifications – Ordinary National Certificate (ONC), Higher National Certificate (HNC) with endorsements' in Electrical Engineering. I was given half a day off each week to attend the HNC first year, and then a full day off for the second year.

When I was 20 I was sent for by the Education Department who looked after all the apprentices, and I was asked which department I wished to join when I finished my apprenticeship. Not thinking I stood a chance I said the Drawing Office. A couple of days later I was interviewed by the Chief Draughtsman of the largest Drawing Office in the Company (over 100 draughtsman) who told me I could continue my training in a couple of the departments, marking out for drilling and cutting of metal. Then before coming out of Time I started work in the Drawing Office as a staff member, starting work at 08.30.

Whilst on day release at Stockport Technical College I was encouraged by two of the Tutors to take the IEE (Institution of Electrical Engineers) English exam, as at that time there was no need to take the course, whereas the following year the rules changed and people had to take a course in English. Luckily, I passed the exam and was then encouraged to join the IEE as a Student Member. Later I became a Graduate Member, and eventually an Associate Member (now Member). The IEE expanded and is now the IET – The Institution of Engineering and Technology.

I did not do National Service due to being an Apprentice in an Arms' producing company, then studying for Professional Qualifications, and then being old enough not to be required!

My first connection with the Electricity Supply Industry was in the late 1940s when I was a Draughtsman at Metropolitan Vickers, Manchester, on High-Frequency Induction Furnaces. One contract I was on was an HF (High Frequency) Vacuum Induction Furnace for the UK Atomic Energy Authority that was used to make the fuel rods for the Magnox Power Stations. One day at the Springfield's factory, where these furnaces were installed, I handled the rod, prior to it being encased in aluminum. It was surprising how heavy a two-foot-long three-quarter inch diameter Uranium rod was.

I left Metropolitan Vickers in February 1956 to join the CEA (Central Electricity Authority) at North Western Region – System Operation Branch – at Didsbury HQ, in the Manchester Grid Control Room. The property was owned by the CEA having been bought in the late 1920s/early 1930s. The address was 825 Wilmslow Road, Didsbury, Manchester. The area we covered was bordered by Scotland, down the Pennines and Peak District to Buxton, across to Crewe and Aberystwyth. The voltages were mainly 132KV system and some 33KV. On

Nationalisation, BEA (British Electric Authority) took control of all Generation and 132KV Grid Lines (which had been under the control of the CEB – Central Electricity Board)

In the early 1950s Andrew Cooper the Divisional Controller of the North Western Region presented the Institution of Electrical Engineers (IEE) Faraday Lecture, given in several locations in the UK (Institution of Engineering and Technology (IET) will have details of this lecture).

When I joined the CEA (Central Electricity Authority) in the Manchester Grid Control Room in February 1956 I was issued with towels. This facility ceased when, shortly afterwards (1st June 1956) a 10% shift allowance was introduced. The staff in the Control Room comprised five Senior Switching Engineers, five Loading Engineers and five Estimate and Costs Engineers, who also took the output readings from the power stations. They were responsible for their own Rota's. On one occasion the Costing Engineers were down to two men for two weeks. Of the others, one left for another job, one went on holiday and the other went off sick. The two of us remaining did 12-hour shifts changing at 08:30 and 20:30, and on the Monday did the changeover at 8:30, 16:30 and 22:00 to facilitate one not doing the nightshift for two weeks.

In February 1956 the Manchester Grid Control dealt with 53 Power stations comprising of multiple sizes of generators, ranging from a 0.3 MW Hydro Station at Coniston to new 60 MW generators at Chadderton and Carrington. One instruction I was given by a Senior Engineer was if the press ring up give them no information – act daft. He had been grossly misreported during the severe winter of 1946/7 when power cuts and a three-day week operated. A reporter rang and asked what the solution to the present situation would be. The Senior Engineer said that in the present situation there was no solution until the weather improved. Pressed further, he said something to the effect that what we *cannot* do is take kettles away from people. The next day the paper said that the Engineers in the supply industry would take the kettles away from people to help relieve the power shortage situation!

The late 1950s saw the arrival of Mr. W C Parker as Regional Director, North West Region, and his policy was that the pulverised fuel Power Stations should economise and burn cheaper slurry fuel, which contained a high-water content. At Bold A Power Station, comprising four 30 MW units, whilst using this fuel the fires in the boilers kept going out. To restart the fires oil burners were used. One morning Bold A number 2 machine had a water carryover into the turbine, resulting in an explosion of the turbine, and causing extensive damage to number 2 unit and the adjacent machines. A new machine had to be ordered to replace unit two, whilst the two adjacent units were repaired and returned to service.

In April 1956 a Russian delegation, led by Malenkov, who later became prime minister, visited the Manchester Grid Control Room. His minders were huge

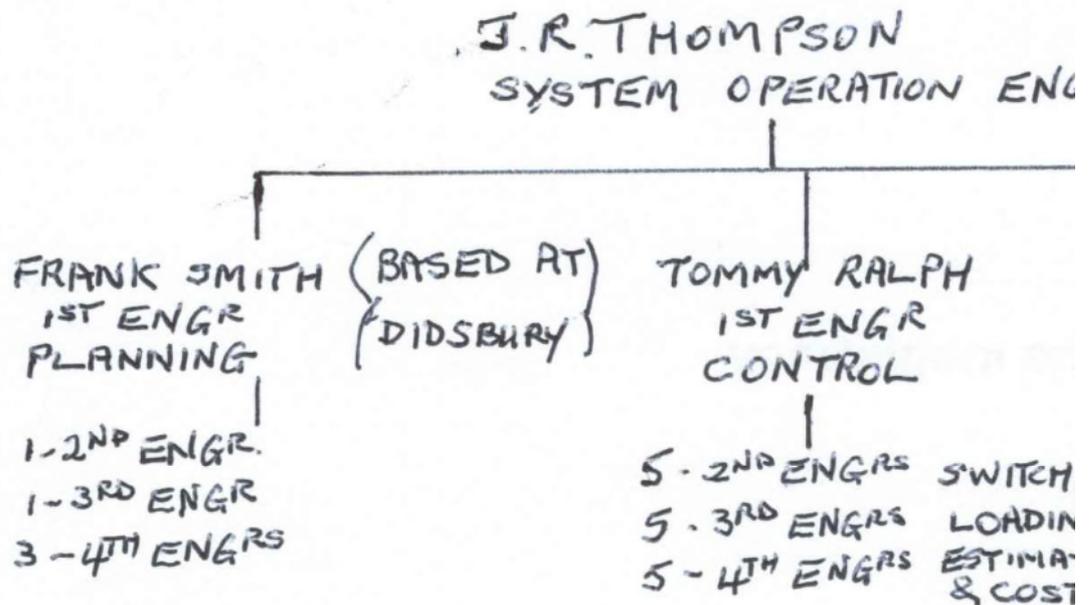
giants of men!

In June or July 1956, the Queen opened Calder Hall Nuclear Power Station in Cumbria. Dick Hutchinson was the switching engineer and was slightly deaf and also very nervous. He kept picking the phone up thinking it was the request for the Queen to close the switch at Calder Hall to the grid!

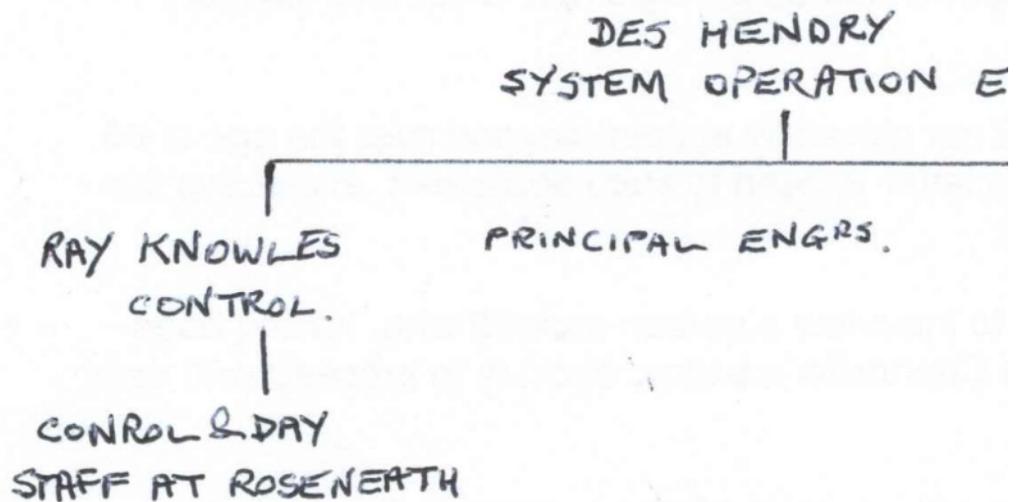
One Wednesday lunchtime the three of us had our lunch as usual brought in from the canteen. When Tommy Ralph, who was manager over the control room, came back from lunch he noticed from his window that the Loading Engineer had fallen asleep, so he went around to the door behind the Senior Switching Engineer and had to wake him to tell him the Loading Engineer was asleep. They both vowed never to have a stodgy pudding again and only stick to the main course!

On winter weekend nightshifts Fred, the Loading Engineer played rugby on Saturday afternoons and came in battered and bruised. Dick the Senior practiced homoeopathy and treated Fred, requesting me to look after the system.

STAFF TREE FEB 1956

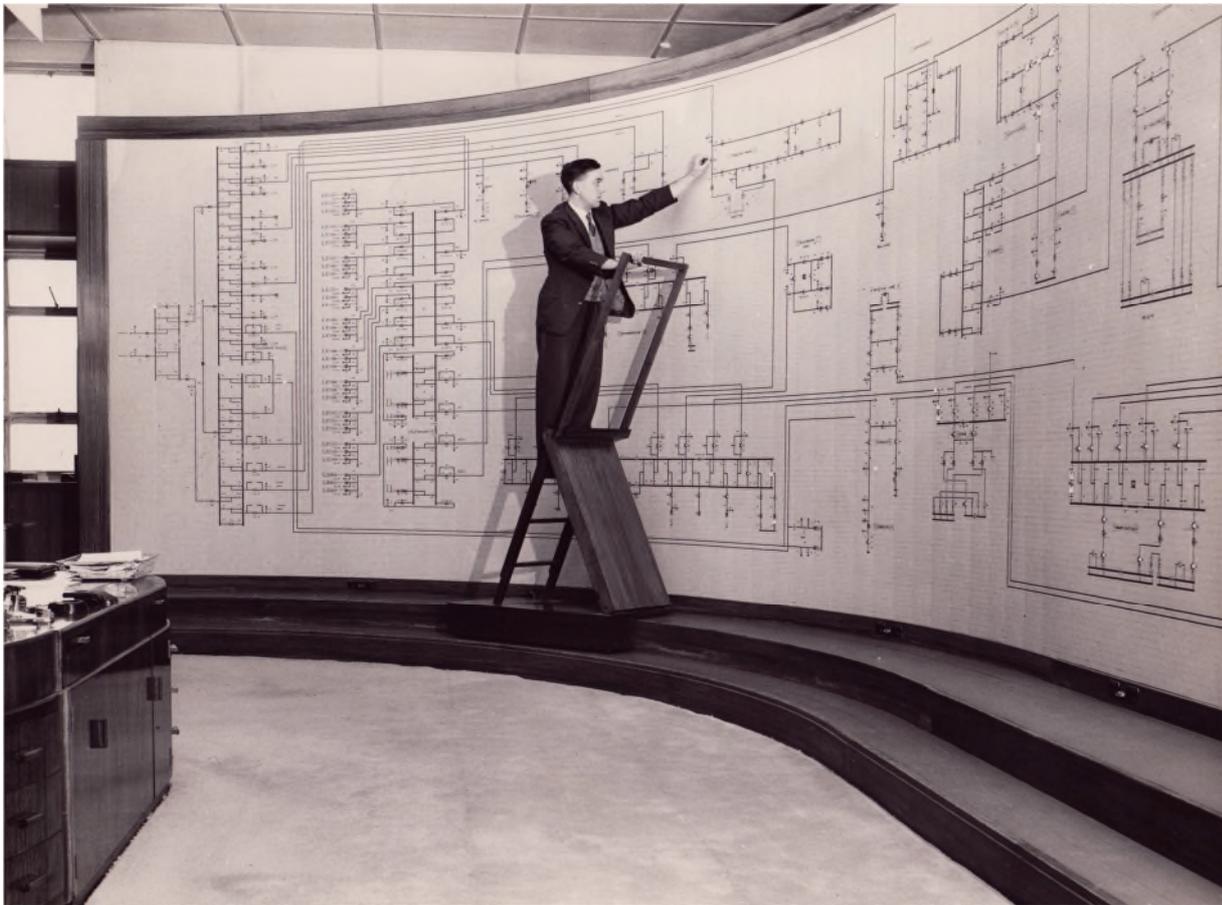


STAFF TREE JULY 1983



On Monday, 12 May 1958 Dick Hutchinson, Fred Forster and I did our last night shift at the Didsbury Control Room. I felt very happy about this, as the new control room at Roseneath was only one mile away from my home!

On Wednesday, 14 May, 1958 Roseneath Grid Control Room opened and all services were transferred from Didsbury. There were two shifts operating that morning: Ted Morris, Frank Sinton and Brian Gee at Didsbury; and Dick Hutchinson, Fred Forster and Len Simpson at Roseneath. Everything went smoothly. Ted Morris, Switching Engineer, became annoyed because he brought Tommy Ralph, the overseeing Manager of the Control Room, with the barometer from Didsbury to Roseneath in his car and they refused to pay the petrol allowance for his car!



Len. Dressing the Area Control Room switching diagram on Wednesday 14 May 1958 at 3pm

Roseneath Grid Control Room was built as an atomic air raid shelter and comprised of three-foot reinforced concrete walls and ceiling. The building was designed with glass windows but in the event of an emergency concrete blocks could be inserted over the windows. These blocks were stored at Offerton and were never needed.

When the planning application for Roseneath Control Room was published an elderly widow who lived opposite objected, but when the Control Room became a reality and was manned 24 hours a day, she said she was wrong to have objected, as she felt more secure in her surroundings and help was near if ever she needed it.

In the first few days at Roseneath a new carpet was laid and someone had managed to acquire a section of it leaving a gap. It must have looked nice on somebody's floor. However, the mystery was never solved.

One problem experienced by the staff working in the new Control Room was that night storage heaters were the heating for the room. In the mornings it became too hot so the windows were opened to dissipate heat, then in the evenings it was chilly and we needed some heat. There were many activities thought up to keep warm. One was golf practice using a plastic ball. One evening as a prank someone substituted a real ball whilst the golfers attended to a telephone call. The golfer took a swipe at the ball, which went through the window, leaving a perfect round hole. The excuse was he slipped with the pole when adjusting the top window! Later on, we were provided with three electric convection heaters.

An emergency Control Room was located at Offerton, Stockport, but was never used. The Telecoms Department looked after it, but were located at Roseneath. It was just a simplified diagram, similar to Didsbury Control Room, from which Offerton was equipped.

After the Nationalisation of the Electricity Supply Industry in 1948, the then BEA (British Electricity Authority) acquired a hotel (Haddon Hall Hotel) in Buxton as a Training and Conference Centre. It was renamed Electricity Hall. Conferences and Training Events were held there with overnight accommodation provided. Courses usually started Monday afternoon and finished Friday lunchtime. Mr. Clarkson was Manager and Head Tutor. One interesting event I was invited to attend in the mid 1960s (probably 1964) was a three-week conference on the development of the Super grid and its equipment. The participants included the heads of all the departments involved in the development of the Super grid, and was a large gathering attended by people from all the Regions.

Roseneath had a power cut due to an Area Board fault, and it was necessary to start the emergency diesel generator but nothing happened as the battery was flat. Thereafter there was a test carried out every week.

The Station Manager of the Diesel group of stations, Alderley Edge, Buxton and Macclesfield, used to service the Roseneath generator on a monthly basis, and he brought "his man" to do the work, but Mr. Carne, the Manager was always dressed in his boiler suit and did most of the work himself. One afternoon this chap in the boiler suit came into the Control Room and asked me if it was

possible for him to borrow a phone to ring his station. I was on the loading desk and it was easier to make the call from the loading desk. I invited him to sit down, gave him the phone and pressed the key. When he finished the call, he said it had made his day to sit and make a call on the loading desk! It was then that I found out that he was the Station Manager. He later serviced the emergency Diesel at Europa House. Four of the five floors at Europa House were rented from Simon Carves in the late 1974 and staff relocated from Didsbury and Roseneath in 1975. Didsbury was then sold to an Insurance Company.

Whenever I was around on shift or on days, he always came to have a chat over plans for his Stations. One day, whilst discussing his plans, my daughter came into the office at Roseneath on her way home from school and he asked if she or her mother liked bulrushes. When she said yes, he said, "Get your dad to bring you to Alderley after tea and we will go and gather some."

At Europa House he still called on me - always in his boiler suit, and with his usual rag, and if the tea trolley came around we brought him a cup. We discussed outages and future running requirements. One day after he left, the Senior Engineer said it was inappropriate for me to entertain workmen at my desk. I took no notice, and this continued to happen the following two months.

On the third month he was telling us about his holiday on the Norfolk Broads where he had hired a boat. The first thing he did was to strip the engine and rebuild it to his to his satisfaction! (He had been the chief engineer on a ship, and he was subsequently offered a job on the Norfolk Broads to service their engines!) Needless to say, there was a bit of laughter. After he departed I was again told about entertaining workmen at my desk. When I told the Senior Engineer who the visitor was all he wanted was to be introduced to him...

When industrial action by the Unions caused disruption and caused a shortage of generation it was necessary to change the merit order of running the stations, resulting in the Diesel sets being top of the order and hence could run for 24 hours. The Stations were only staffed for 'two shifts' operation and consequently were not staffed overnight. On ringing Mr. Carne and telling him his stations could run continuously for 24 hours if he wished, his immediate response was I'll do it for you and he did. He organised his staff, including himself, to man the three Stations 24 hours a day, including weekends, during various disputes.

At times of industrial disputes affecting the various supplies to Power Stations, the Stations reported into the Short-Term Planning - Management Information Centre on a daily basis, including weekends, on the deliveries they had received i.e. fuel, lubricating oil, lighting up oil, water treatment additives and any other commodity affecting generation; and an assessment of how many hours' generation they had. A meeting was then held with the Director of Generation and the members of the Generation Section to determine the merit

order of the Stations running according to the extent of their ability to generate within the limits of the staffing levels (two shifts or three shifts) and other restrictions.

An assessment was then made of the plant available for the Area peak of the following day with a seven-stage power cut (the first two stages were voltage reduction, the further five stages of 5% each for power cuts) and this information was passed over to System Operation HQ (National Grid day staff) with the hourly running availability of the last station on load and the next station to be on load. From this National Grid Control gave us the plant requirements for the following day and from this information (given mid/late afternoon) Grid Control were given the merit order and plant available for the following day along with the National Control assessment. At the end of one of these Industrial Actions I had accumulated quite a few extra hours of work and was due "time off in lieu". Without even thinking about it the Director of Generation said, "You're not having time off you will be paid for the extra hours."

One Saturday evening I received a request from Maentwrog Hydro Station for a test run to check everything, as they had just had a new pipeline installed, and the water intake had been cleared of debris. The next call was the Station Superintendent (Manager) who was extremely distressed. The new pipeline had collapsed, and it was later found that a small tree which had fallen had blocked the intake when the Generator was started. The flow of water into the intake was restricted and this caused the blockage. I asked him if he wanted me to inform the Director of Generation. He said yes as he could not face him – he was too distressed.

A photo of Maentwrog Station and pipelines can be seen in the Dinorwig paper.

On Sunday afternoons the radio loop around the stations was tested. (It was not possible to contact each location from Roseneath.) The Senior Engineer usually did this. On one Sunday after the clock change Ellis Sykes said "I will really test them with this message" which was, "Did you remember to put your clocks back today?" The clocks had actually been put forward! Needless to say, there was discussion at the start of the circuit and the message changed. Ellis then took them to task for changing the message and interrupting a couple of times on the circuit to correct the message. (Tony's comment- You have just reminded me doing this at Thames North GCA on a Sunday day shift when I worked there. It was always chaotic, some recipients found asleep!)

In December 1959 or 1960 after the Christmas break, the largest estimating error for the load on the day after Boxing Day occurred. We at Grid Control Centre were not aware that many firms were having a break between Christmas and New Year. I believe that the errors were between 20% and 25% – certainly three areas had 25%, including me at Manchester.

In 1961 Ffestiniog Pumped Storage Power Station, 360 MW, was first used to arrest the television load pick up after Coronation Street, and it was noticeable how it corrected the frequency drop quickly. Occasionally visitor groups came around the Control Room in the evening, and it was surprising to them how we were able to tell them their habits at the end of television programmes, and what effect it had on the System.

During 1962 and 1963 System Operation in Manchester was instrumental in developing a computer program in conjunction with Computer Programmers in Guildford - LOSSO 1, and then LOSSO 2, being the forerunner of the GOAL programme (Generation Ordering And Loading). LOSSO is Load Ordering for System, System Operation 1 and 2. We sent generation details to Computer Branch at Guildford who then programmed the plant requirements and sent back by fax the details of the Plant to be used. We studied the Return and noted modifications required. This was pioneering work. GOAL was developed by National Control (lead by Ray Lewis) in conjunction with Computer Branch and all Grid Control Areas. We met regularly in London to discuss possible modifications and improvements to the program, and tested Output at our own locations after sending in details of Plant availability and restrictions. When I left in July 1983 it was accurate and could be used for Plant ordering.

At Roseneath there were no boards or signs to indicate who we were, or what took place in the building. One night at 1am two Police Officers came in (doors not being locked) curious as to what we did and what was going on. They left astounded.

The telephony arrangement for Roseneath was to have three telephone lines from three different telephone exchanges with each Power Station and Substation having communication from two exchanges. These were Hulme Hall (Cheadle Hulme), Gatley and Stockport. The normal exchange for the area was actually Bramhall, but this was not used because it was a manually operated exchange at that time. This arrangement was so that communications could be maintained at all times, should an exchange have problems.

In February 1966 Harold Keys arranged traffic calming ramps in the entrance driveway into Roseneath. This was done over the weekend. I was one of the early arrivals, in a Mini, taking it slowly. The front wheels went over the ramp and then the car grounded on the bump of the ramp. This closed the access drive until several of us lifted the car off the ramp, which was later reduced in size.

Monks of Warrington built the extension at Roseneath in the early 1960s, to accommodate the two new Control Rooms (not air raid shelters) and a Computer block on top of the existing Area Control Room. One evening one of the Monks workers had a puncture on his bike. As I had a bicycle pump on my bike I lent it to him to get him home. The following morning on returning the pump he asked me if I used firewood at home. When I said yes, he said he

would send some round. That evening the drive at home was full of wood – a tipper lorry delivered a full load! I never did use it all.

On Saturday, 10 September, 1966, to mark the opening of the new Control Rooms and Computer Block, Roseneath held an Open Day for staff, families and friends, which was well received and well attended. In June 1971 another Open Day was arranged for the local general public and various demonstrations were set up. As a thank you to the staff involved Mr. Connon, the Director-General gave a seven-course dinner on 5 July, 1971 at Didsbury headquarters.

The Water Resources Board in the late 60s/early 70s needed water supply reinforcement in Wales and the Midlands. One of their schemes was to take water from Nant-y-Moch reservoir which was the main water supply for Rheidol Hydro Electric station. The dam had been built by the CEGB for this 53 MW scheme and was complete and operating at this time. Assessment work had been done by Headquarters and the Region became involved in 1972. A study group and working party was formed, and meetings held with the Water Resources Board. An interim report was issued in August 1972 after discussions with the South Western Region. A meeting with the Water Resources Board was cancelled after which the Water Resources Board agreed the proposed scheme was not viable for them.

During late 1963/early 1964 a helicopter was on hire to the North Western Region for Transmission line inspections and the possibility of locating hot spots on the conductor connections. The helicopter was required by the North-Wales District to do a survey. Ron Anderson and I had a meeting at Ffestiniog Power Station on 10 February 1964, and arrangements were made for us to travel by this helicopter, as it was based at Ringway Airport. (Now Manchester Airport) We were picked up at AVRO's airfield at Woodford, home of the Lancaster and Vulcan bombers. The helicopter dropped us off at Trawsfynydd from where the District took us onto Ffestiniog. On the way back to Woodford the pilot asked us our plans for the evening, and it came out that it was my daughter's 10th birthday and she would be with her mother to pick us up. He said that if she would like a trip in the helicopter he would take her to Ringway if we could pick her up. Needless to say, she was over the moon and helped to put the helicopter to bed in its hangar.

The sports and social club arranged Christmas parties for the children of its members, and it was sometimes difficult for the control room staff children to be taken if their fathers were on shift. So, pickups and returns were made by other "off shift" colleagues to take the children to the parties.

In the early 1970s the fire alarms went off and we evacuated the buildings (except Control Room Staff). Two fire engines arrived from different directions and a couple of police cars, one of which came through Bramhall Park as a shortcut. We knew it was not an exercise as John McCarthy (the fire officer)

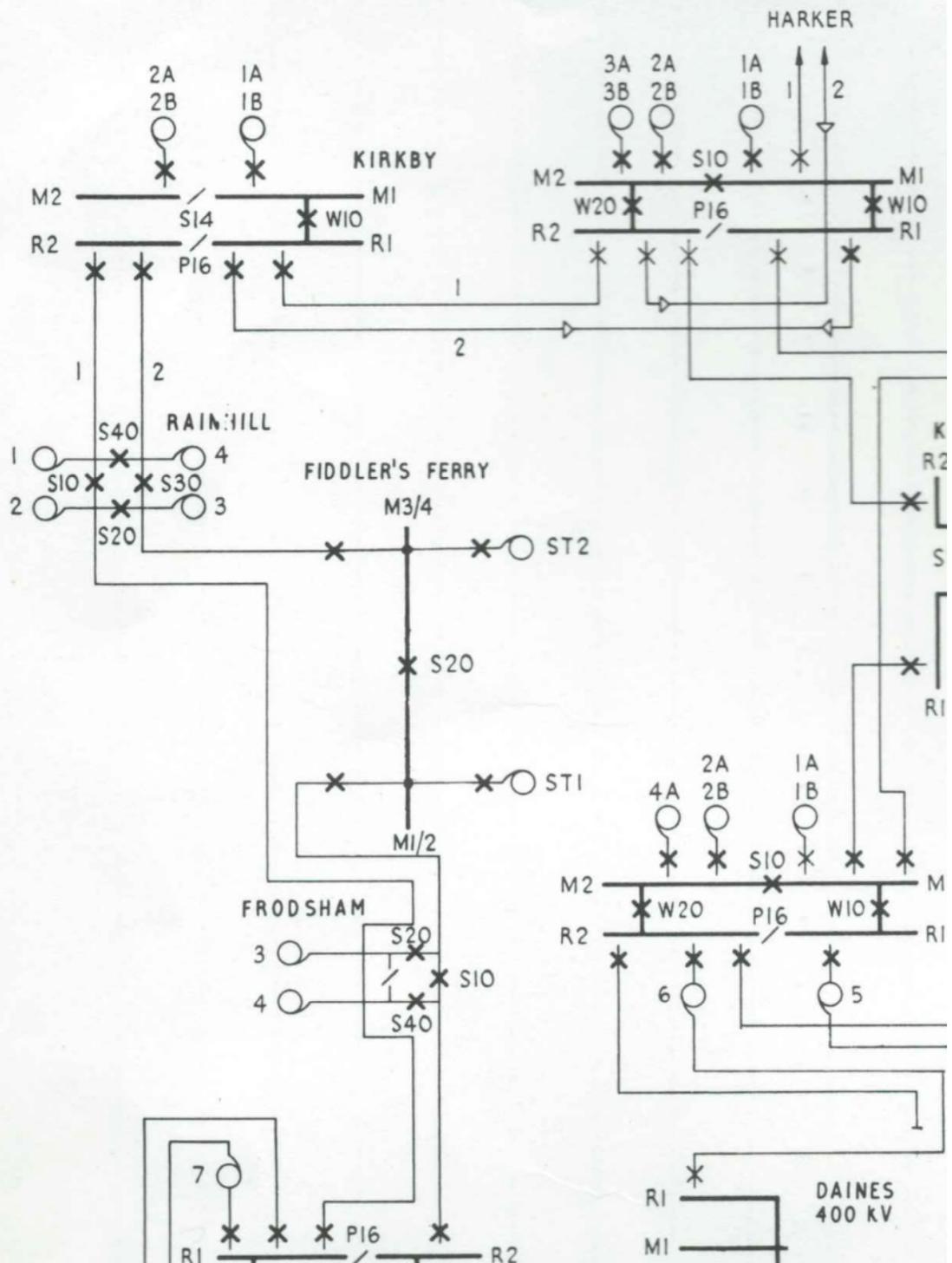
was on leave. It was common practice for the deliveries for the Telecoms Section to be delivered through one of the locked fire doors, and as such the Telephonist was informed. This was done, but one of the parcels fell onto the glass of one of the fire alarms and broke it, setting off the alarm. The courier was not aware that the parcel had fallen. Margaret the Telephonist gave a minute or so for a phone call to say what had happened before she made the call to the Fire Brigade.

For approximately five years (probably 1966 to 1970) the Cumbria District of the North Western Region was transferred to the Newcastle Grid Control. Newcastle Grid Control was divided between Manchester and Leeds Grid Control Areas about 1970. This happened because it was considered that Newcastle was a small area that could easily be handled by Manchester and Leeds, because Generation Stations were being closed at the time.

Whilst under Manchester Control, meetings were arranged in January/February each year to discuss Transmission outages for the current year in the Cumbria Region with North Western Area Board, District Engineers and ourselves. Each outage was discussed and restoration times allocated should the circuit need to be restored. Some of the outages were more onerous and needed further investigation for alternative supply to the affected area. Further meetings were then arranged to discuss methods to secure supplies if a further fault occurred.

In March 1969 the weather was cloudy with daytime temperatures in the lower lying areas (i.e. Manchester) of about 5°C with night frosts; whereas in the high Pennine area (between Rochdale and Stalybridge) it was low cloud; misty and daytime temperatures were at or below zero. Because of the misty and icy conditions, the conductors on the 275 KV lines between Rochdale and Stalybridge built up with ice, up to 4 to 6 inches in parts.

CENTRAL ELECTRICITY GENERATION
 HEADQUARTERS
 400/275KV SYSTEM
 MANCHESTER GRID CONNECTIONS



On Thursday 13th and Friday 14th a thaw set in, and the ice on the conductors started to fall off. This caused the conductors to "gallop" and the wavelength either side of the towers synchronised, and pulled two or three towers out of the ground (just like extracting teeth) and toppling them, exposing the foundation legs bent on the ground (I may be able to find my photographs of these towers. The line was out for several weeks and temporary adjustments were made to the circuits at Rochdale and Stalybridge. At Rochdale, the Elland to Stalybridge line was 'jumped' across to the Rochdale to Stalybridge line, making an Elland to Carrington line; whilst at Stalybridge there were no alterations necessary due to it being a bus bar substation, and it only needed to be isolated and earthed.

In the late 1970s or early 1980s Dinorwig Pumped Storage inner workings had been completed, and the Transformer and Generation Halls were void of all materials and were ready to accept their Transformers and machinery. The North Western Management made arrangements that the Headquarters' Staff who wished to, could visit the site, and the necessary transport would be made available on the Saturday. A large number of staff with wives and husbands made the journey and were shown where the first excavator/tunneling machine was lost in the first attempted tunnel excavation, when the ceiling caved in embedding the machine forever. A new tunnel entrance was made a few yards from the collapse. When we went into the tunnel we expected to go uphill or on the level but went downhill to the vast Halls where the Water Generators and Transformers had to be installed. Needless to say, it was a long uphill walk back to the surface – about half a mile. We were then taken up to view the top lake.

When Bolton Power Station was shut down in March 1976, Derek Shepherd the Station Manager arranged to have an historic shutdown. The three machines running were two HP (High Pressure) and the 10 MW LP (Low Pressure) machine number 6. He invited the Director of Generation, Mr. Roy Houghton, to close the station by shutting off the last machine, whilst he would shut down the LP number 6 machine. It meant that with the current order of merit tables these machines would be run out of merit. One Loading Engineer said he would not comply "as it was not right" but on being informed that the fuel being burnt was not subject to replacement cost (as no further fuel was to be delivered, rather taken away to another station at additional cost) changed his mind. After closure the LP set was taken to the Manchester Science Museum where Derek Shepperd was a very active member, and part of the casing was removed to show the Turbine and Generator working parts with information notes adjacent to the machine. (I still have the Science Museum literature of explanation.)

In the mid to late 1980s the Institution of Electrical Engineers (now the Institution of Engineering and Technology) promoted an exercise for School Sixth Formers called the Power Station game. The aim of the game was to locate and build a Power Station – there were three types of station: Coal, Oil

and Nuclear - and the schools were encouraged to arrange teams of six pupils for each type of station. If the School had sufficient pupils (about 15 or more) to play the game over two days, we went to the school. Those Schools who could supply only one team were invited to Manchester University Electrical Department to participate in the game over the two days. On one occasion we had six teams participating: two teams each for the three types of Station but working independently.

One team was all girls from Lymm Grammar School and they were very anti-Nuclear. Needless to say, they drew the Nuclear Station. Part of the game was that each team would present their Station and the rationale for it, after which the other teams would present arguments for it not being feasible. One young lady from Lymm demolished both Coal presentations by saying that Mr. Scargill was finished as Mrs. Thatcher had got the measure of him!

We managed to have Mr. Roy Houghton, Director of Generation, North Western Region, as the main judge. His first comment was that he wouldn't buy any of their power stations, and he proceeded to explain where they had gone wrong. Needless to say, the girls from Lymm won easily by arguing effectively against the other presentations.

Bromborough Power Station was oil fired and it was discovered, after ladies in the area were having problems with holes in their tights, that acid smuts were being produced from the Station's chimneys during start-up. To solve the problem the station was brought on early so that all four generators were on load by 6:30 a.m. However, in summer the minimum load trough was 6 a.m. on Sundays and on two successive occasions the load was very light due to the warm weather and it was not possible to give Bromborough any load at this time, as we were struggling to keep what was on load to its minimum Generation.

The Charge Engineer was not very happy when told that if he could not delay bringing his machines on load to our requirements he would not be able to generate that day. The Machines did come on load at a later time. The following Sunday I was also on a night shift (adjusted rota for holiday requirements) and the same thing happened. The Charge Engineer said he had had the same problems with last week's Loading Engineer. When I replied I had had the same problem with the same Charge Engineer laughter broke out and the problem was solved in the same way!

In the control room what were called "danger notices" were shown on the Switching Display Diagram. One notice was that if any 275/400 KV tripped and auto re-closed six times it was to be left out of service for the District Engineers to investigate. One-night thunderstorms were raging over Anglesey and the double circuit lines between Wylfa and Pentir kept tripping out (not together fortunately) and both were well over the six times limit. In order to prevent Wylfa Nuclear Station being isolated from the Grid System (only two

33 KV lines being the other circuits) the Control Engineers had no alternative but to ignore the directive.

A similar situation arose years earlier when during an extremely foggy night in the Liverpool area 132 KV lines were tripping out all night, and the circuits had to be closed manually, there being no auto re-close on those lines at that time. The final straw that night was when Clarence Dock number 7 set was synchronised and its only output was through the Vulcan Street Transformer onto the grid. The 132 KV circuits to the transformer tripped out and could not be re-synchronised onto the grid.

When I left the control room in April 1962 to join the day staff, I was replaced by a young Eric Chefneux who later moved on to greater things within the Industry. Between 1962 and my retirement in 1983 I was on Short Term Planning, Transmission and then Generation. We had three tier Control from the early 1950s right through until 1990. The 132 KV system was gradually handed over to the Area Boards by 1990.

Roseneath was formerly a family residence and was purchased by the CEA in the late 1940s/early 1950s, when it came on the market. Oakwood (the house next door) was purchased in the late 1950s, when it too came up for sale. Oakwood was then occupied by System Operation Day staff. A third house, Branksome, was bought shortly afterwards, and was occupied by the Computer Branch.

After closure of Roseneath Grid Control in 1990 the houses, along with Branksome and Oakwood, were put up for sale. All three houses were bought by a developer and demolished. When the building contractors eventually moved on site in the early 1990s they experienced great difficulties in demolishing the original Control Block due to its reinforced structure. Now, on the site of these three houses and the control block 12 large private houses have been built, and the road serving them is called Roseneath.



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Edited by Tony Malins

Thanks to Catherine Beavis (Len's daughter) for typing and checking Lens script.