

April 1998

The article below was originally printed in the SWEB Magazine forty five years ago, dated March 1953 Coronation Year edition. We reprint it now to see how good was Mr.M.O.George in foretelling the future. The illustrations are by Wally Weeks, who was Civil Draughtsman in Bristol at the time, and later became Assistant Chief Draughtsman at Bath. Who was M.O.George? Anyone remember, answers to the editor?

## A VISIT TO BLAGDON "B"

by *M. O. GEORGE*

{the Board's latest recruit from the (Ginger) Beer Family—Ed.]

*Illustrations by W. T. WEEKS*

The Editor, by means known only to editors, has "persuaded" me to write and tell you of a recent visit to the new atomic power station at Blagdon, the visit being the result of my luck in the ballot for the Board's jubilee celebrations.

Our small party of twelve set off at 8 a.m. from the roof of Electricity House in one of the Board's standard line patrol helicopters, accompanied by the Chief Engineer's Generation Section Head in his own two-seater "Flea", and we touched down in the station car park five minutes later, to be received by Mr. Mountain, the Station Superintendent.

On one side of the car park was a large-office building into which we were conducted by our host, to whom the leader of the party expressed the question which was on everybody's lips: "Where is this power station we have heard so much about, and how much further have we to go?"

Mr. Mountain replied that this was a very natural question, as the station itself was invisible from the air or land. "But I can assure you," he added, "that we shall soon be seeing the best of Britain's machinery which, though only started up a month ago, is already supplying two per cent, of the whole of England's demands."

Mr. Mountain then proceeded to give us a brief outline of the history of the two stations, Blagdon "A" and Blagdon "B", commencing from the mining of uranium in the Mendip Hills in 1975, and the opening of the first atomic station in 1988, to the wonders we were to see in the "B" station.

He explained that the ideal site for a super-station was proximity to the fuel supply, a plentiful water supply, massive rock formation for isotope protection of personnel and finally, if possible, proximity to the

electrical load-centre to save transmission losses. All these requirements were met by the Blagdon site, and it would be really difficult to find anywhere half as good.

Before splitting us up into four groups, each with a separate guide, our host jocularly told us that we must be prepared for a hot shower before entering the station itself, but hastened to explain that this would prove no embarrassment, as the protecting fluid would be automatically sprayed over our clothes and body as we passed through the first chamber, and that this, was a safety precaution enforced on everybody who entered the station, the skins being easily shed after our visit without causing any difficulties whatsoever.

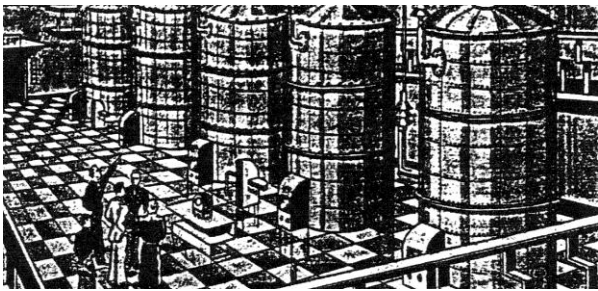


*The Generating Section Heads 2-seater Flea*

As one of the most junior of the party I was in the third group, and spent the next ten minutes (there being a five-minute gap between the start of each group's tour) looking at the photographs and diagrams which lined the otherwise friendly reception-room. One most interesting exhibit was a diagram showing the load

growth of our Board since its inception in 1948, and it came as something of a shock to me to realise that when the Board started there was only a little over 300 MW of load, whereas now, a mere 50 years later, the Board's load exceeds 2,000 MW.

At last the tea minutes were over and our guide led the three of us from the reception room into the next room which was simply marked "Spray". There we were asked to walk to one end of the room and back, in the process having to step over two hurdles. There was a faint hissing noise and a steamy substance seemed to come out of nozzles in the roof, but by the time we had done as requested we were each covered in a transparent plastic sheath, and passed on through another door marked "Control".



*Large Cylinders throbbing with life the walls of the 1998 Power Station*

Here we found one engineer seated at a desk on which were numerous telephones and push buttons, and on the wall in front of him there was a diagram with a large number of lines connecting small lights of different colours, some flashing and some stationary. Our guide explained the meaning of the various lights and push buttons, but the main impression that remained with me was that this little room was the brain or nerve centre of the whole station.

We then passed out of the room into a corridor which appeared to be lined on both sides with lift doors, twelve on each side, of which two or three were large enough to take the biggest piece of machinery. We walked towards one marked "A" and in a matter of seconds lined the walls of the 1998 power station. We had descended 100 feet and emerged into what appeared to be a huge hall filled with rows and rows of enamelled structures which, we were told, comprised the switchgear controlling all the energy being sent out from the station as well as the energy used in the station and that supplied to the adjacent mines. I felt that we had at last entered the real station, but was amazed at the cleanliness and the absence of anyone in attendance. We walked through these galleries and then descended a further 100 feet in a "B" lift to what we were told was the generator gallery.

The scene was of six very large cylinders, one after the other, again finished in ivory-coloured enamel, spotlessly clean, but one could feel a very slight throb and knew instinctively that

the large cylinders were alive with energy. A further lift journey brought us to the turbine house, and the scene was not very different from the one we had just left, except that there appeared to be three times the number of cylinders, and the colour scheme was a light grey instead of cream.

I knew from the length of our lift journeys that we must be 300 or 400 feet down and that the steam temperature at the turbine inlets was reputed to be 2,000° F., and yet none of us appeared to feel any discomfort. I asked our guide why this was, and he pointed to a large square box in each corner of the immense gallery and spoke just one word—"Air-conditioners".

By this time our little party had become enthusiastic about the wonders we had seen, but knew that the most important section had yet to be visited. Passing out of the far end of the turbine gallery we noticed what appeared to be a horizontal escalator fitted with a hand-rail and stools.

On instructions from our guide we each walked on to this moving platform, sat down and were soon whisked along a corridor for about a quarter of a mile, when the movement slowed down to walking pace and we stood opposite another series of lift doors which appeared to have several dials flanked by red and green warning lights.

Our guide explained that these were automatic Geiger counters to ensure that there was no radioactive material accidentally carried in or out of lifts which would drop us another 500ft. past several galleries of steam-raising equipment to the fission control rooms themselves.

The guide's verb "drop" was correct, but we arrived in one whole piece and walked out of the lift across the corridor into a room very similar to the control room at the start of our tour, except that there appeared to be very many more dial instruments and two men instead of one. Our guide apologised for not being able to show us more, but explained that all the energy release was carried out behind thousands of tons of rock, and that nearly all the operations were automatically controlled, including the delivery rate of the raw fuel from the mines half a mile along the range.

We returned by another route and appeared to shoot up in an "F" lift, finding ourselves once more in the reception room waiting for the last group to complete their tour before returning to Bristol in time for lunch, while the Generation "Head" flew on to his old coal stations at Plymouth, Falmouth and Yelland.

