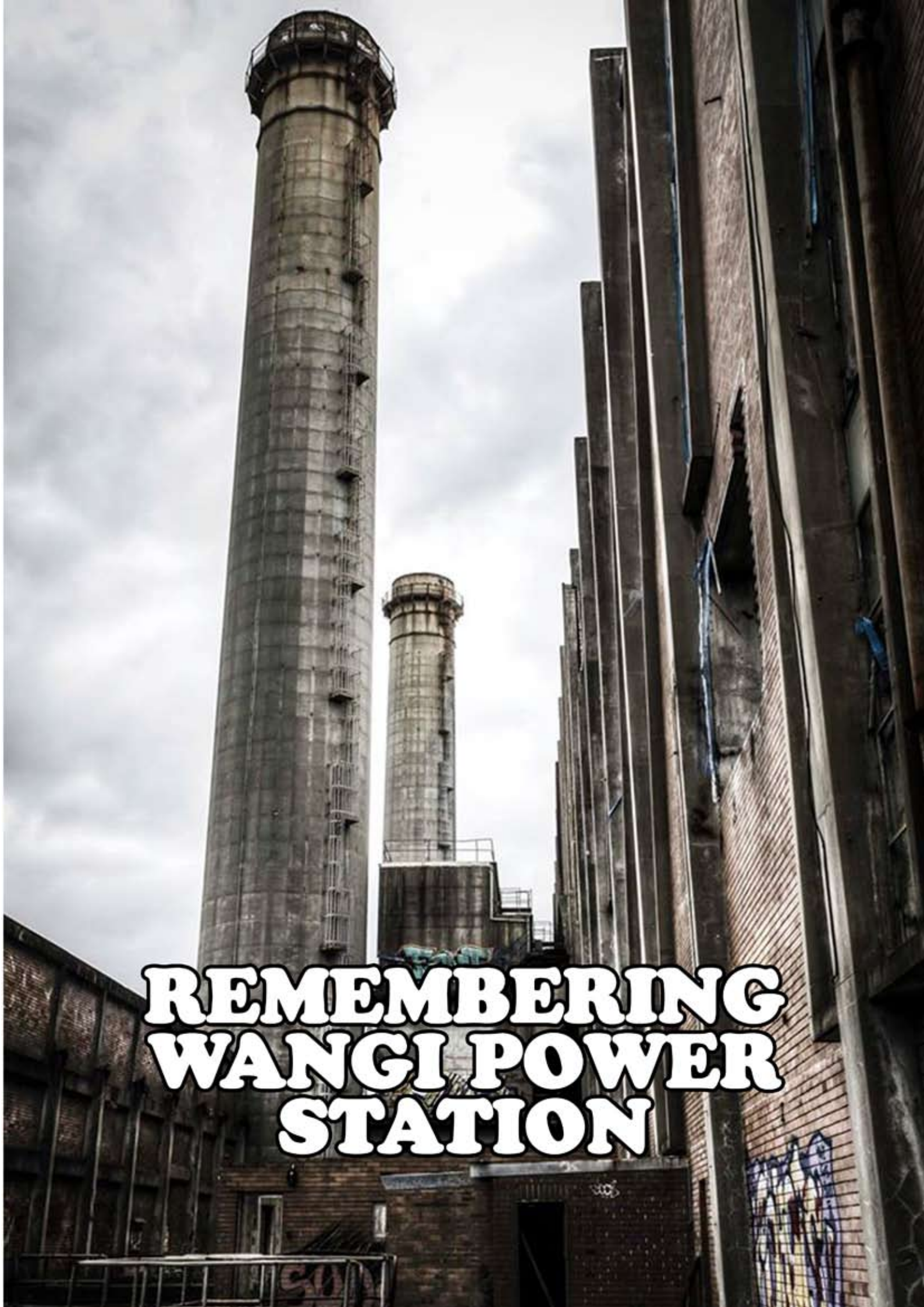
REMEMBERING
WANGI POWER
STATION

Photo: Brett Patman, Lost Collective

Photo: Bottomley

Photo: Brett Patman, Lost Collective

Wangi Power station began supplying power to NSW in late 1958. It took ten years to build, and a thousand men to build it. Many of the workforce lived in a makeshift Tent City on a hill near the station. It was decommissioned in 1986.

The interviewees in this booklet all worked at Wangi power station in one capacity or another, and were happy to trot out some of their memories about the experience.

Anyone seriously interested in the Wangi power station should look at Brett Patman's superlative images in ***The Lost Collective****, either on Facebook or his website.*

Bill Bottomley, March 2016

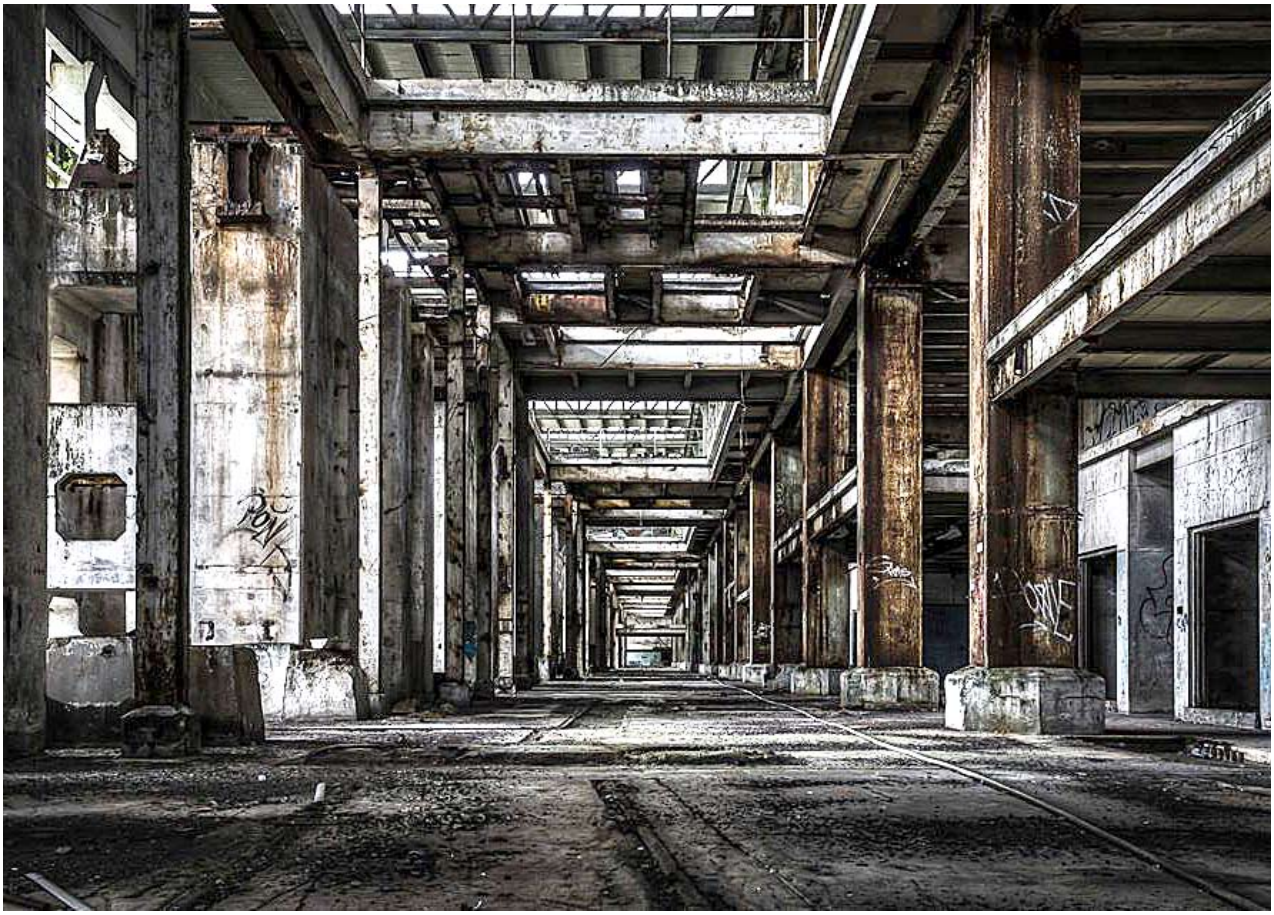

Photo: Brett Patman, Lost Collective

Generator Room

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Photo: Brett Patman, Lost Collective

I WAS A SECRETARY DURING ALL STAGES OF THE CONSTRUCTION OF THE STATION

Photo:McQueeney

Interview with Judy McQueeney
March 6, 2016

JUDY: My first brush with Wangi goes back to the mid forties. I was about six or seven. My grandparents used to come here. Just after the war there were a lot of people buying disposal-store army tents cheaply for camping. You know, the khaki ones with the strange top on them. They must have brought me here for a holiday from the coalfields to stay for a while, because we weren't living here then, and they used to come down here on holiday.

Where they camped was a big wetland then. Very few people in Wangi would know that we were the proud owners of a very fine wetland. It was a casuarina and mangrove wetland. You can still see mangroves trying to struggle out and grow. It intrigues me that people camped there. It must have been a dry period, and they were near the mouth of the creek – Wangi Creek. People don't know there is such a thing as Wangi Creek. You can still find its headwaters, and it's

actually forced into the canal up near the power station. It runs through the bush and has a nice old time, then it suddenly empties into the canal.

In environmental terms there's no way that what happened there could happen today. There'd be people fighting on barricades. It was a different time then. It was just after the war and they needed more electricity. So they decided to build a power station, and make it a big one. Wangi was just right, because you had the inlet and outlet perfectly positioned on the peninsula to get the water coolant through the power station.

Awaba mine was already there to produce the coal need for the power station, and my father was offered the job of Deputy there. He had been working in the coalfields of Cessnock. And so that's how we came to come down here when I was about ten or eleven or something like that. I suppose it would have been 1948 or 49.

Where we're sitting now, the road out the front there was called Wangi Rd, not David Street. It was part of the main road. Dobell Drive didn't exist, and all across the road was all market gardens. You can still see the channel across there that overflows when there's a flood. Because it's on a flood plain. These things tend to be forgotten. If you stand at Wangi Creek and look up you can see the valley that is part of the Wangi Creek flood plain..

There was also a big water hole down there, and I had a horse in that paddock for many years. It was quite a different world. Now I overlook a car park. The bus stop was down by the Workers Club and other roads around here didn't exist then. Of course the roads today are a great improvement, because then they were all gravel. It took you forever to get to Toronto, let alone Newcastle. When I went to high school I used to have to get a bus down there at six o'clock in the morning, and I didn't get back till six at night. I had to get a bus, then the train, and then walk. My father, who was put down the mines in Cessnock when he was 14, insisted I go to a good high school because he believed in higher education of the best quality, and girls or not, we were given the best that was available at the time, for which I'm forever grateful.

After I left Newcastle Girls' High (where I went to high school), I went to a Secretarial College where I was taught business principles, higher English, shorthand and typing. That set me up to look for a clerical job, and I got a job with a haulage company over at Boolaroo for about nine months.Women in general did not have a wide range of job opportunities in the 1950's.

The first part of the power house construction was to build the outlet canal, and the coffer dam over the south side of the Lake. All that boring and tunneling to create the canal was also burying poor old Wangi Creek. The canal had to be in place before they could start to build the station. A company called Citra Fougerolle, who were part of a huge French crowd Companie d'Industrielle de Travaux, were part of the Schneider group in Paris

Down there near the bridge where you go in to the netball courts there was a big wooden building – it might have come from the RAAF base – that they used

as a site office. They had another office in Newcastle, I think, but the one here was their main construction site office. They were looking for a secretary, and I'd done French at high school (my French was probably a lot better then than it is today). In 1955 I started working for them, and I was there for about 18 months.

It was really quite fun working with them. I'd never had anything to do with urbane Parisians. Some of them were like that, and others were just quite mad. Occasionally I'd have to go into the Bank with one of the leading hands, and it was terrifying. It was a white knuckle ride! I was only about 17 at this stage, so it was quite a learning curve. But they were good people to work for – very generous. I did receive a large pay rise from them.

When they'd finished the canal they packed up and went, and I virtually walked straight into the job as a Secretary with the Construction Chief Engineer. The construction office was now on-site. This would have been in 1956. I think I was listed as a technical officer or a clerk on their records, but basically I was secretary to the Construction Engineer – he was the top banana who managed the site. And again, that was enjoyable work – and it was just literally a walk across the paddock to go to work from my home.

There were two waves that changed Wangi, in my opinion. First were the miners who came here with their tents for a holiday. The whole waterfront was full of tents. And lots of the guys who holidayed here, thinking of their retirement, bought land here while it was cheap and built on it. A lot of the people who first came here in tents ended up as residents. A lot of them moved down way before retirement because all the collieries were opening up. You had Awaba, and Newstan over the back of Fassifern. Awaba was the main source of coal for the power station. It was all in place, waiting for the power station to happen. So that changed the dynamics of the place. You got a lot of people from the Hunter Valley moving down here, and it was no longer the little village it once was.

The other wave was like a small Snowy River Project. There was an influx of Italians, and Europeans generally to work on the construction site, and it was a beehive! The whole hill up the other side of the power station was covered in tents. A lot of them were white because it was very hot – army tents used to hold the heat pretty badly. My mother, who hadn't worked since she was a young girl was asked to come up and do some cooking for them because they were hard-pressed to get that sort of help in that early period and they had lots of hungry young men to feed.

So the construction phase brought in all these European workers, and there was a much more continental vibe around the place – and all these handsome Italians! By this time I was 18 or so, and quite a few people thought they were pretty spunky. But they were very nice and polite. They were terrific people.

Anyway, the construction went on, and the Opening was in 1958. Premiers and all that sort of thing were there from memory. And again, I just walked out of Construction and into the newly-built power station straight into another secretarial job. The Opening signaled the Commissioning of all the plant and the handover to Generation.

From the get-go the power station was unusual. It was the first (and it turns out to also be the last) still living "P&O-style" power station – the three big chimneys and bricks everywhere. If you look at the more recent power stations around the lake, they're a much lighter framework. But not this one, there are millions and millions of bricks and it was built to last. It was a huge building, and in its day it was the biggest power station. It solved pretty much all the power problems that NSW was having at the time.

Another wave of people who started to come to the area were the Engineers, Technicians, tradesmen and the all people that worked for the Commission. The Commission became a big employer, and suddenly you got people who might have been working in Newcastle moved down here. And a lot of people came up from Sydney.

Those waves went along almost side by side. The miners were a bit ahead, because this had been a favourite spot for miners for years. But these changes were what changed Wangi into a township, from a village. A small township, but different to a village.

When I moved into the new building to work for the Power Station Superintendant/Generation all the offices were in the upper quadrant. There were dozens of engineers worked in all levels of the quadrant. I remember there was a big open space that was going to be a cafeteria, but they never seemed to get around to that. Until you get up there, you don't realize what a huge empty space it is. I had just started to play golf, and some of the engineers said they'd give me lessons. We used to take coir mats down there, and a few golf clubs, and those lightweight plastic practice golf balls with the holes in them, and they used to teach me. We used to whack balls all over the place! It was such fun. We used to do that at lunchtime – it was really great.

The power station superintendent for generation was head of a different group from construction. His floor was a big office area, and he had a closed-in office down in one corner. One wall was entirely glass – tough glass – and it looked down along the line turbines. You could stand there and see down to the power station floor – to the turbines – and always the background hum was there. Mind you, if I'd realized how much asbestos was in that place I mightn't have been all that happy standing there.

Some years later, generator #2 overheated and blew up one scarey night. I went to work the next day, and I'll never forget the sight, looking down on the turbines. You can imagine the size of the shrapnel. That caused a lot of problems for a while losing all that production while they waited for a replacement generator to be shipped from U.K..

I became involved in various green movements and got really involved with climate change before anyone else was talking about it. Back in the early 80s I was fighting open cuts and that sort of stuff. At that time they were wanting to put an open cut mine at the foot of the Watagans!

A large part of my early life was spent overseas. After I stopped working at the

power house, I went up to New Guinea for six months or so to see my sister. I got a job up there – doing drawings for airports. I'd say I could do anything if it meant I could get a job, and I'd learn on the job, so to speak – it seemed simpler! My sister and her friend were going to England, and I thought: "That's not a bad idea. I'll go to England!" So another very good friend, Anne Roberts, who worked with me at the power station, agreed to come too, so the four of us took off for England in 1961.

From there I got involved in the computer industry – the early days of it – and we were sent to Europe on courses and over to Canada and that, so it was quite a few years till I wandered back to Wangi. The company that I worked for overseas was in Sydney, and when I came back I worked for them. But even in those days it was only two, two and a half hours to travel to Wangi, so I came home regularly to see my parents. (Both of them died much younger than they should have). So I've always had this attachment to Wangi.

In my early thirties I had a child, and I decided that I didn't want to bring him up in Sydney, and that's why I moved back to this area. I can remember when I first came back from overseas I went for a walk down the waterfront, only to find that it had been asphalted! All in front of the Workers' Club. They'd asphalted it and were using it as a car park! Well, that took about 5 seconds for me to get on the phone to Council and give them my thoughts on this desecration and work to get all that ripped up! When you think back and you see some of the vandalism that occurs… Wangi is still very very beautiful, but it's hard to describe how beautiful it was before the whole ecostructure of that bay was changed. It used to be sand. It was crystal-clear. You could walk along through the fine water grass and see octopus (not the blue ringed ones, but big ones) and small fish. It was just magical – it was a wonderful place to grow up in. We rode horses everywhere. Because of the shape of Wangi peninsula with its narrow neck at the point, it was a perfect place to use for agistment, and people just brought their cows and horses out here and let 'em go! My friend and I thought it was our civil duty to give them exercise, so we just used to pinch a horse or two occasionally and take 'em for a ride. Bareback, of course. It was classy if we had a bit of rope. It was an amazing and fun life, but obviously that was before I started working in my teens. The power station was going full tilt in those years that I was working in generation.

When they closed the power station down, my Mum had never had a happier day because she was always whinging about the dust, in those days before people were as aware of pollution. And the filters they put into the power station never worked properly. If the wind was coming the wrong way you'd get all this muck on your washing. But mostly in the summertime you had nor'easters so it didn't matter.

Recently I was eating out with friends and telling them I was going to talk to you. They asked me why you wanted to talk to me, and I said: "Well, I built Wangi power station!" In a way I sort of did, because I was there at every stage, from the very beginning to when it was all in full flight, and all the generators were online. I knew most of the electrical and mechanical engineers who headed up the group of technical officers, and they were all friends. There were a lot of staff,

and they all got along very well. When I got back from overseas I would know peoples' faces, but I couldn't always remember the names.

It was a big, well-constructed Power Station definitely one of a kind, and it saddens me that nothing has been done with it since its closure. It would make a great centre for the arts.

It is true that back in the day there were more State-run things like the Electricity Commision. The Awaba mine is now owned by Centennial Coal, I think, but before it was a State-run Mine.

And as I say, those waves of new people had quite an effect on the area, especially the Europeans. I'm not sure that many of them would have stayed, but there was an influence. They must have been encouraged to come here as immigrants, like or maybe part of the scheme used for the Snowy River Project. A lot of them had little or no English. I remember when my Mum first started working up there she was pretty gobsmacked, but she found that after a while she just loved it because they were so nice to her. You can imagine these Italian boys away from home for the first time, and my mother – well, she was just a lovely woman and everyone told their problems to her even though she did not understand a word. She must have stunned the europeans with her three veg and grey meat!!.

Because of where I was, in that main office, I heard most of what was going on – especially if they were shouted discussions. Most of the leading hands were Italian, I think, so they must have had some English. I'm not saying all of them did, but if you think what Citra did, going back to the first stage – all their employees were French. The key element was European and they just moved in and did the job.

There didn't seem to be much resentment of the newcomers. I have to say that some old white men do tend to be a bit racist. I'm reminded of a conversation I heard in Coles one day recently. This very Aussie bloke was talking to an acquaintance: "Ah, g'day Mahomet. How're ya going?"… and they started talking about pumpkins in their back yard. Now if you'd gone up to that Aussie guy and asked him how he felt about Muslims, or Indians, or Pakistanis or whatever, he would probably have said something negative, and if you'd then said to him: "But what about Mahomet?" you'd get "Oh, he's alright, he's a good bloke he lives just down the street". I find that sort of thing fascinating, and I honestly think that's why it would be really easy to turn Australia back into having a more generous attitude because I suspect our so called racisim is casual rather an endemic..

I mentioned asbestos before. It cost the council I suspect possibly millions to clean out all the asbestos from the power station. It was serious. They got a whole team of people … I think it was probably a joint operation between Council and State government. Then a guy from up north somewhere bought it for a peppercorn amount from the Council. He was going to do it all up. Apparently he had been a fitter and turner or something, and he had fond memories of this 'last of the P&O power stations'. You can see why it was called

that if you get out on the lake and look back at it. But he died a few years back, and his sons were never keen on the idea, so it never advanced. But I remember seeing plans put forward by one group where the canal would go up and form a big marina where yachts could be moored, and all of the quadrant part of the station would be turned into units, and the shell of the station would be turned into a mall like Stocklands, with arts centres there and shops and all that sort of stuff. I'm not clear what's happening with it now, because my understanding is that it does have some sort of heritage protection – but these things can be brushed aside with impunity if it suits the powers that be.

When I look back to those times, when you look at the size and scope of that building – it wasn't just that you had a big building, you had the generators that came out from England, you had all the auxiliary stuff that went along with the power station. You had the substations, the lines that took the power all over NSW, so it was huge undertaking. They actually had a rail line that came off the main Newcastle-Sydney line that enabled them to bring the coal around from Awaba. There were huge coal dumps up behind the power station.

Way back in those construction days they had Clydesdale horses up there. I used to go up there with a friend and sit on them. It was like sitting on a tanker! They were gorgeous. I have this memory of seeing them pulling trees out, you know, the stumps.

The other unusual thing about the power station, and I suspect that they discovered this when the finally got on site, is that the power station is sitting on caissons. And when people talk of building houses there I feel like "Good luck to them", because it's a wetland. It's a flood plain. I can't remember now whether it was 60 ft or 60 metres, but they had to go a long way down to find solid ground. When they were tunneling under where the station was to go, they would have found out how unstable it was. I mean, any flood plain is unstable. It looks fine when it hasn't had water running over it for years, and when they stopped Wangi Creek with the canal, that would have dried it out a lot anyway.

I wrote a paper on the Toronto wetlands when I was doing my postgraduate work at Newcastle Uni, and it was really awful what happened to that wetland. You look at photographs of it that were taken when I was a kid – again, a flood plain, all around Stony Creek and that bay there, and they stabilized it with chitter from Newstan mine. I used to play netball there, and sometimes you couldn't play because you were ankle-deep in water. But that wetland was just so vibrant. I used to get my long lens and take photographs of the birds there. It was just an amazing place.

But there's no point gnashing your teeth. It was a different world then. Nobody thought about what they were doing with all that warm water, beyond that the fishing was great. Yet what it did to the whole ecosystem was to make the seagrasses grow, but they were weak because of the chemical input of all the warm water, and they snapped off, and suddenly you had piles and piles of weed coming in on the big nor'easters, and so the whole ecosystem of the shoreline changed. When people start to argue with me on climate change, I can get quite aerated, because I saw it happen. Suddenly, all that sand that we used

to swim over down there is gone! Back in the 80s, when we were talking about the tonnes and tonnes of particulates from the power stations as they began to ring the lake, we discovered that Toronto Bay, by the early 80s had silted up one metre in 50 years! And that's pretty dramatic in a shallow lake. The particulate fallout also created acid rain, which is another problem. You would hope that as you grow old (a bit disgracefully in some areas, I hope), that you'd also get a bit of wisdom and learn to look at things differently.

Climate change is becoming more obvious in our changing weather patterns… I have just been loving the past few days because we're getting the old style booming nor'easters, and they're not often like that a lot anymore. They have become quite flukey. It's changed a lot since I was a kid. You can even see the flowers getting all confused about when to flower.

That power station was a very necessary blessing – it made a big difference to all of NSW, I can see that, looking back. I think I was always aware of my environment because I grew up in a beautiful area and in a very natural way. It was a great place to be as a kid and I love it still 60 odd years later..

Photo: Brett Patman, Lost Collective

Administration building rooftop

APPRENTICED TO WANGI POWER STATION AT AGE 15

Photo: Bottomley

Interview with Greg Whitbourne
February 16, 2016

GREG: I started my apprenticeship at Wangi. There were five of us started together, from Toronto, Wangi, Awaba. I was only 15 when I started, and I was boarding at Wangi. This was after the tents on the hill had gone. The lady I boarded with was an industrial nurse for the whole Wangi complex when they were building it. She and her husband were a lovely couple, and I kept in contact with them till they died.

It was a big bloody step, you know, when they built the power station. It was the biggest in Australia at the time. This was just after the war. Originally the railways owned it – the railways were responsible for power generation back in those days. There was one at White Bay, one at Balmain – and Zara Street in Newcastle. They're all gone now.

When they built Wangi it was in two parts. There was A Station and B Station. A Station was a more old-fashioned type of design. The coal went into the furnace in lumps about the size of a big marble. There was a rotor that had blades on it that threw the coal across onto the back/rear of the grate, and the grate slowly moved forward and tipped the ash off the other side. That ash was very popular, and they used it just about everywhere – for footings, foundations… you know the football field that is near the power station? Well, that was all levelled off with ash from Wangi. And that was the last of the grate fed boilers. But now they all use pulverized fuel, which is as fine as baby powder. That's fired into the boiler with air, and the ash that comes off is almost like cement it is now used everywhere as a cement additive – you'd think it was cement to look at, like dry grey powder. It's not much good for filling, but the old ash from Wangi A Station was very popular. When they were building houses they'd put the ash down first and the concrete on top. It was particularly good because it was porous and drained well. I can remember planting grass on the football oval when they first built it.

I started my apprenticeship as a fitter & machinist when I was 15. I'd just done the Intermediate Certificate. I was only a kid, and to be put into an industry like that was daunting…Were they tough on you, you ask? Well, there was always some sort of initiation in those days. You were caught and had a liberal application of grease and coal dust applied to your nether regions. Once you'd done that, well, you were in. You couldn't do that these days, though. People'd want to sue you or… but it was all in good fun, I suppose, it was part of growing up and becoming a man.

I was very pleased with the way we got trained there. The apprentice workshop was the start of it, and it was very good. You learnt all the basics of the trade. I did a five year apprenticeship, and for first and second year I went to tech every week at Newcastle The third and fourth year it was once a fortnight, and in the last year you had electives where you could go and do hydraulics or pneumatics, and I chose to do toolmaking.

My wife Pat and I got married. We were very young. She was 19 and I was 20. In those days you had to get your parents' permission to marry because we were under 21. After we were married I got conscripted to go to Vietnam. Out of the five of us who started the apprenticeship I was the one who drew the short straw, and it really pissed me off. I got deferred for a year because I was going to tech of a night time. But there seemed to be no end to the war, and I said to Pat that I might as well bight the bullet and get this over with, so as not to have this thing hanging over our head.

Serving in Vietnam sort of stole my innocence you know? Ironically a girl I used to go out with in Wangi lost her brother to the Vietnam war while I was there. When I came back the blokes seemed different, but it was probably me. They thought differently – and probably the war did me a lot of favours.

When I got promoted in the Electricity Commission as far as I could go I just pulled the pin and left, and we started our own business. I probably never would have done that if I'd never gone away. Of the other guys that I started my

apprenticeship with, two of them died (I do believe their deaths were asbestos-related, but you can never know that), and there are still two going. They've spent their whole life in the Commission. We still keep in touch,

We do a lot of volunteer work now. My wife and I have been all over the place. Two years ago we did a volunteer job in Hanoi, and the people we were working with and their families were the enemy, forty years ago when I was serving in Vietnam. Pat and I talked it over and wondered if we should tell them that actually we were the bad guys from their perspective. Anyway, we decided we would, and it was the best thing we ever did. They'd never met someone from the other side and neither had we. The guy I was working with, his uncle had been killed in the war, his other uncle suffers pretty badly from PTSD. Anyway, back to Wangi… It was unionized at the time, but apprentices didn't have to join. The blokes I worked with were very good tradesmen and I learned a lot from them – not just trade things, but life things, you know… You'd been at school, and suddenly you were growing up with men. To me, many school teachers were adults who had never left school, you know – whereas you get out in the real world, and… A lot of those blokes I was working with were returned second world war blokes later on I understood the hell they lived with.

They were quite good, really. There was a very good relationship among the apprentices and we all got on well. I've got some great memories of my time there. It was a good place to work. I've got very good memories of Wangi generally, not just the work, but the lady I was boarding with. They had a son, and we were the same age, and we got on really well. There was the social life, football, the Wangi picture theatre and milkshakes at George's café with special friends.

Then I got a motorbike. I got a special licence to ride it from Mannering Park (where Dad and Mum lived) to work and to tech. I had to get a special licence because I was under age. Apparently you can still do it under special circumstances.

Just before I went to Wangi they had a major disaster with one of the turbines in the power house. The governor failed and the turbine oversped and lifted the whole bloody unit out – just destroyed it. That was pretty serious, yeah – particularly in those times, when electricity was in short supply. By the time I started there it had been repaired, but there was still evidence of damage around on the building.

As far as the asbestos goes, I probably got dusted. I've got marks on my lungs, and I keep a check on that. If you've got it, you've got it, and you can't do anything about it. On the turbines the asbestos was very thick, and we'd dig it off with a pick, and then blow it all off with the air! It was everywhere. And it was the same at Vales Point. I remember going to a lecture once at… I think it was Vales Point. It was a time when asbestos was a really hot topic – it was very controversial -- if it was good or bad, you know. They were trying to convince all the employees that there was nothing wrong with it – that it was quite safe. You'd go to these lectures and they'd bullshit to you about how safe it was. I remember there was one smart arse out the front once who got some asbestos

and actually ate it. But there was a bit of poetic justice to that because I heard later that he died of asbestosis. But they knew it was bad – they knew. The precipitators never worked properly at Wangi. (Precipitators scrub the dust out of the flue gases). I remember, every day, where I was boarding, the dust was just everywhere. But it wasn't asbestos dust.

These days Myuna Bay and Cooranbong collieries supply Eraring. Wangi used to get their coal from Awaba. There was a train used to come across. You know where you turn in to go to Wangi today, and you go over the hill and down a bit? There's a road to the right that used to be the way to get to Wangi. The one where you go in now wasn't there. That's all new there now. Originally you went into Wangi down that second turn to the right, down past the power station, and down past where Myuna Colliery is now. And if you look now, just after that turn-off, the railway line is still there but they've taken the bridge down. The bridge was there for years and years, and for some reason they decided to remove it. They might have taken the railway lines too. I don't know. But that's the way they used to bring the coal in from Awaba. The railway line and all that was built specially to bring the coal in. The line links in with the main railway line between Sydney and Newcastle, and it's a shame that they let that go. And the one at Toronto. I used to go to tech on the train from Toronto. Sometimes I'd get the bus into Toronto and go that way, or I'd get the bus over to Awaba, and get on the train there to go to tech. You'd think they'd have at least kept the land. There's a line runs from Newcastle out to Redhead. That land should have been kept secured, because in fifty years' time they'll probably want to run a railway line out there.

……*(digression)*……

It was interesting for me…I did a volunteer job a few years ago in Fiji. I went over there to set up a training programme for first and second year apprentices. Not that I've got any teaching background, but they still use that training programme now in tech colleges, which I'm quite proud of. Before I left I called in at the Tighes Hill tech college in Newcastle where I did fitting & machining , just to see the teachers and get a few clues from them, you know, suggestions and advice. And they were very helpful I asked them how many classes they had these days. They said they had about two or three. "What, is that per day?" I asked, and they said no, per week. When I was there we used to have two classes a day, and that was 40 or 50 years ago. It's just gone backwards. I had a bloke helping me with a job one day, and I asked to put a pop rivet in, and he didn't know how to do it! Just basic hand skills are disappearing – like knowing how to hang a door, or…

As I said earlier, the boilers at Wangi were old-fashioned compared to nowadays, in that they were a grate-type boiler. They had cast-iron bars that ran across on a chain thing. It had all holes through it, and it would slowly move over and the combustion air would blow up through all the holes. The coal would burn on a big bed on the grate, and when it was fully burnt it would drop off into a hopper underneath. The new furnaces now are just a furnace from top to bottom – just a ball of fire in them.

B Station at Wangi was the first power station that burned pulverized coal. It was the new direction in thermal power station design, and it hasn't changed that much since. They've changed the boilers a bit… the way they run the hot gases through has changed slightly but not significantly. It is interesting to note that the coal crusher in those days used big steel balls like oversized marbles) one person could just barely lift one. Anyway they were widely used on buck's nights. A handle and chain was welded to the ball. The unfortunate victim would have the ball padlocked to their leg. Sometimes the chain was left short and the poor victim would be seen stooped over drinking his beer, as the night wore on the inconvenience became less apparent. There was a big demand for Wangi coal crushing mill balls.

I always have a good memory of a fitter I worked with. He was the union delegate, and a lot of the time he was away on union business. They always had a TA (tradesman's assistant), and the TA and myself were always doing what he should have been doing, 'cos he was always away on union business. Sometimes I would make a mistake; he would then sometimes give me a bolicking and if it was bad enough he would give me a bit of a backhander. I was never offended by this. In fact I had not seen him for years, and it was at Ted's funeral (the lady who I boarded with) that I met with him. He had had a stroke and had a walking stick. I said Alex I should kick that bloody walking stick out from under you: with that we embraced each other, he was a great bloke and taught me heaps; thanks Alex.

They cooled the generators – and they still do it today – they cooled them with hydrogen, because hydrogen has the best heat transfer of any of the gases. So they circulate the hydrogen and it's all contained, with no leaks or anything. (If it does leak it's very explosive). Then it goes through heat exchangers and that's the way they cool the generator. They don't just blow air through it.

You can imagine, the shaft drives through into the alternator, and you've got to seal where it goes through so no hydrogen escapes. So they use labyrinths (a maze of fixed rings that are very close to the shaft, oil runs through it and stops the hydrogen getting out.) with oil, and where that bolts on, they had a big rubber gasket. And that had to be joined. You had to be able to put it on around the shaft without having to take the shaft out, see.(It is a major job to remove the shaft so there must be a way of changing the gasket without removing the shaft; hence join the gasket) I can remember that I made a vulcaniser up to do it – I was only a second year apprentice at the time – and Alex gave me the directions on how to do it, and it came up really good. He took me up to the superintendant to show him this thing that I'd made, and apparently he was quite impressed with it. Now the nuts that I'd put on it --- d'you remember nuts called "acorn nuts?"(dome nuts) Well, they didn't have any in the store, but the doors in the toilets were all fastened with them. So I stole them from the toilets and put ordinary nuts back on the doors. The superintendant had been a fitter himself years ago, and had come up through the old school. "Hmmm", he said to me, "Where'd you get the nuts from? They don't have them in the store." Cos he knew, see? "They look like the ones they use in the toilets," he said, and I said" Yeah, they do", and he laughed his head off. At that time I would have only been around sixteen and a half, and it was quite daunting to be up in the

superintendent's office, even though I was not up there in trouble or anything.

A lot of time you worked with the same bloke, but they did move you around a bit. At Wangi there was foreman who looked after the turbine and the boiler and another foreman who looked after the ash plant. Sometimes you'd be in the ash plant and other times you'd be in the boiler/turbine section. At Vales Point and Munmorah they broke it down even further. There was a mill section where they crushed the coal – a mill section, a turbine section, an ash plant section, and a boiler section, and you moved around to the different sections for your training in all those sections. Then in your last year they'd put you in the instrument workshop, because they had instrument fitters there who installed the controls. Then they'd put you down with the draftsmen for a while – they had draftsmen there then, then they'd put you down with the technical officers who did all the ordering and that for about three months – just to give you a general idea of the whole operation, which was good. I was given the chance a few times to move to the operational side of things – you know, blokes who actually drive the machines – but I preferred the maintenance side. Operational work paid a bit more because they had to pay for shiftwork, and in the end they had maintenance done in shifts, too. At Vales Point they were working day and afternoon shifts. The operators, of course, have to be there 24/7.

I started my apprenticeship in Sydney – I was actually only 14 when I started. I left school in the November, and by December I had a job in Sydney, at St Leonards. I only worked there for about three weeks when I applied for this job at Wangi, and I got it. There was quite an opportunity to choose your work. Remember, that in those days, people who were trained as apprentices were working in the Railways, BHP in Newcastle, the Electricity Commission, the Lampworks in Newcastle, Gonninans were there, Stuarts and Lloyds … I can't think of them all now—and of course there were the coal mines, as well,…public works – see, there were all these opportunities…

But today… the Electricity Commission hardly have any apprentices now. The problem we've got is that there aren't any places to train apprentices any more… nobody's training anyone but they all want the best, you know. BHP's gone, so there's nothing there, the coal mines all have contractors, so they have very few apprentices. What's going to happen in twenty years' time?

Well, I know what's happening now. They bring planeloads in from Korea when they do a re-fit. That's what they did with Eraring. It's a disgrace.

It was a whole new chapter in my life when I started up the engineering business. I was used to picking up my pay at the end of the week, and suddenly I was putting in tenders for jobs that I had to do for that price. The apprenticeship course didn't teach you how to do that, you picked that up from the school of hard knocks.

I couldn't work under the conditions they have now. All the restrictions…

SOME REFLECTIONS ON WORKING IN POWER STATIONS

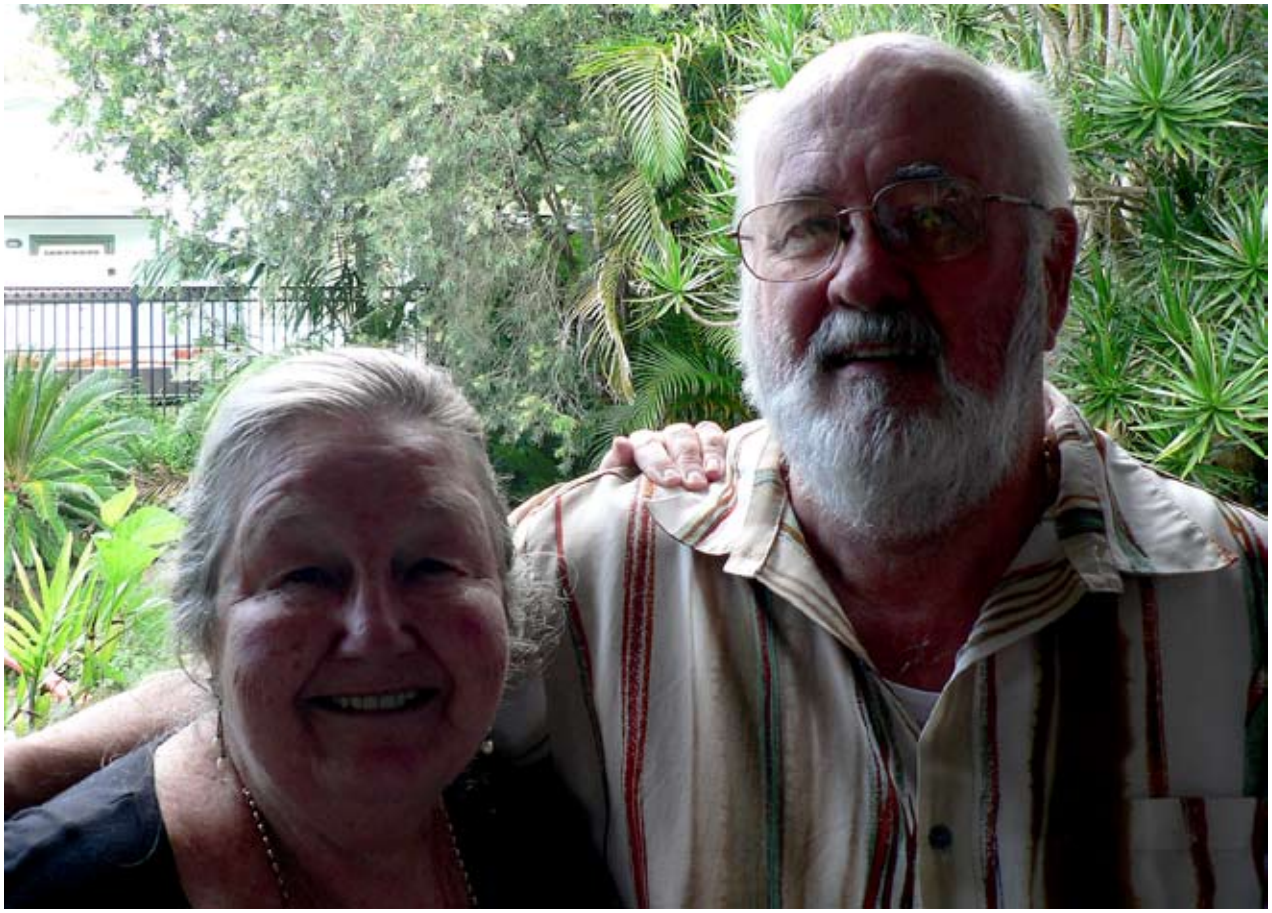


Photo: Bottomley

Interview with Jim and Merle Rawson

February 6, 2016

JIM: I was a engineering officer with the electricity commission for 35 years my work was the installation and maintenance protection and communication systems I was on shift work at they state control center at Carlingford for about 20 years. At Wangi on top of the hill there used to be two microwave towers – one, originally had a valve type system microwave system that operated to Carlingford, which was the state control and up to Newcastle and then down south to Yass. and they always had A and B back-up. Then they decided that they'd go for the new solid state stuff, and that's why they had to build the second tower. Anyhow, when the place got decommissioned, they had these two towers that had nothing wrong with them and which covered the whole Lake and what did they do? They pulled the towers down.

MERLE: And then they closed the roadway and ploughed it all up…
The power station closed down about 1987 or 88…but it stopped being a power

station around ’82 or ’83.

JIM: There was a skeleton staff there for years. Here were four 25 megawatt GEC generators there.. We had to scrap the lot. There were big round insignia on the generators, and the last time I saw them they were over at Eraring power station. . They were quite big. It cost them 30 million to get the asbestos out of the station at Wangi.

MERLE: Lots of blokes got dusted. I had one bloke who was due to retire. Now, I was the person who organized his pay and everything. I asked him why he didn’t get on and do everything he had to do with the Dust Diseases Board, and Superannuation and all the rest of it. I told him to do it straightaway and make sure he got it all done. His wife was with him at the time, and she came in the next week and said: “Thank you for doing that. He died yesterday.”

JIM: There were a lot of rip-offs went on, but they were pretty good about it when you got dusted.

MERLE: Yes, they were pretty good, actually. They didn’t tell you that you could get it, but once you did, if you told them about it they came good.

JIM: The trick was you had to tell them that you had it.

The thing is, I worked at Bunnerong, Pyrmont, White Bay and Balmain – all of those stations, but I didn’t work in Generation. I was with Transmission, which looked after all the communications and protection, which was beaut because you could get to go where you wanted to go under the guise of checking the communications out. The Wangi station was pretty tame, asbestos-wise, compared to Bunnerong , Pyrmont ,White Bay and Balmain They were very old stations. Bunnerong was one of the first – that’s where they used to run “brown-outs” – remember brown outs?

Most power stations are built on coal mines. You’ll rarely find a power station that’s not near a coal mine, except Bunnerong. There they used to ship the coal in. They were the only one they brought the coal in by train. There are coal mines all under Sydney – the place riddled with them…

JIM: In Balmain,and Pyrmont there’s tunnels would still all be there, I’m sure, they go out under Snapper Island, right under the harbour, and even over to Mosman. Sydney’s rich in coal, but imagine the yike that would go up now if they started digging it up for coal! But anyhow, that’s why, where you find a power station, you’ll find a coal mine.

MERLE: This mine here (Myuna) extends right out to Swansea…
I came to Wangi to sort of work at the power station, but I was working from Newcastle as a time-keeper. Prior to that I was a time-keeper in Sydney. I was in Head Office, and I did relief work, so I’ve worked in every power station in NSW and every Transmission section – I’ve even worked on the Hume Weir, so I’ve had pretty wide experience of power stations. I love ‘em! Love technology, love engineering – all that sort of thing.

JIM: Whereas I was in Communications in every station I worked in. I started off with the PMG as a TIT (technician in training). It was a five year course, and it was a meaningful course – it wasn't just electronics. You spend a year at the Training College at Alexandria – twelve months full time. And the kids who hadn't done woodwork and metalwork – we're talking 15 and 16 year olds, though some of them had their Leaving Certificate – they didn't know the front end from the back end of a file. They had to file all these carbon blocks, and drill holes in concrete and then in tiles without breaking them – all basic stuff. They spent twelve months giving you all your colour codes and your basic electrical theory, and then they let you loose!

I went into it, not because I was interested in electronics, but … I started off as an apprentice pastrycook. My grandfather owned a whole heap of cake shops, but he wouldn't let me work in any of them. I had to go and work with another mob, and I started with Greeks over at Five Dock. They were paying me three pounds two and six a week and I had to ride my pushbike from Croydon Park to Five Dock every day. At the tender age of fifteen it was ruining my sex life! And the only reason I went into the training was because they paid me three pounds seven and six a week. I was used to working, and I couldn't get used to sitting on my arse all day at school and getting paid for it.

MERLE: In the fifties five bob was a lot of money.

JIM: With the Commission, no one was allowed into high-voltage areas, till you were 21, except if you were an apprentice, and then you had to be accompanied by a tradesman. So they never trained any of their own staff as far as communications and electronics went. . So you had to be 21 for a starter before you could go into a switch yard. They've changed the rules a lot since then – now it's eighteen. That's the reason I ended up with the Commission, because I was on Country Install with PMG then, putting in all the coaxial cable stuff as it was in those days between Lismore and Brisbane. But the thing was, once you're appointed to an Install division you can't get released.. The jobs were twelve month jobs – they were long jobs, but that's the reason I joined the commission. I could see the writing on the wall – they'd appointed me as a senior tech and I wasn't going anywhere fast – I was going to stay on Install for the rest of my life. I was 21 when I stared with the Commission.

The whole secret of the power system is not the voltages – from Eraring you can get 500,000 volts, and now that we've got DC volts going to Tasmania we're up to a million volts. The voltage doesn't mean diddly – it's the frequency. 50 cycles is the whole secret of the system. They change the voltage, but the frequency never changes. If it gets down to 47.9 everything trips out. At 48.5 all sorts of bells and whistles start happening, and below that, things start popping out.

Wangi power station was the only power station you could light with a match! Basically, that's what they did. They'd light the boilers up and bring it up on line. All the other power stations required power to start the up

MERLE: Except for Warragamba Dam . To open it you had to go down to the bottom.

JIM: Warragamba was hydro. They used to have a thing called a black start, where they simulated everything. If all the power stations go out, they've got to start them up before they can supply power to the people. They've got gas turbines now that they use as part of the black start, but prior to that, what they used to do to simulate was to say: "OK. Black Start. Everything's shit itself. We've got to get Pyrmont on line first up, because it only takes a few hours." So they simulated the feeder transmission line right through to Warragamba through Penrith and back up. They'd open the mains there and get 25 meg coming down to start Pyrmont. This particular time, everyone's all set up and ready to go, and they found that the battery that was used to start the diesel to open the valve was flat!

MERLE: And you know how high Warragamba Dam is! Well, the diesel was right down the bottom. And there were no lifts, were there, because the power was out.

JIM: …so the operator had to race up and get the battery out of his truck! But this place here (Wangi), is a pommy design. It's triple brick thick. When the earthquake came there were a few cracks. We lived at Puna Road at the time, in an old miner's cottage…

MERLE: …and the earthquake lifted our house up and dropped it back down again.

JIM: We were out at the time, and when we got home the chimney had fallen down.

MERLE: I was at the hairdresser's and the ceiling fell in.

JIM: See, the power station is built on a swamp. It's all reclaimed land, right through to where the workers' club is. I think they had to go down sixty or seventy feet to find bedrock. The design of the place is meant to look like a ship, and if you go to the front of it, it looks out…it's got magnificent views over the lake. Being a pommy design, it was designed to keep all the heat in – which is the last thing you need in Australia! You look at all of the so-called new stations – they're all steel and aluminium, but they've all got big gaps at the bottom so that they can get the ventilation going up. I was at Vales point once when Turbine No 1 caught fire, and boy was the ventilation good. It just went whooof! And took the roof out! That's when I said: "I don't work in Generation, I'm in Transmission. Hooroo!" Anyway, when Wangi was generating it was bloody hot. They had salt dispensers everywhere – little tablet things. And you had to keep taking them.

MERLE: And at that stage they didn't realize that the body salt you were losing wasn't the same as ordinary salt. It was mandatory to use them, but I never did.

The Timekeeper's office was up on one of the higher floors, and we had all these beautiful views. One of the best parts was they spent around ten thousand dollars on repairing the roof into the Timekeeper's office… and remember, I'm the only timekeeper there, and the whole station was closed down, and I was

alone in a room as big as this house. Nup. I went downstairs to work! The station by this had been mothballed and there was just some maintenance staff.

JIM: It was basic. It was the same as at Bunnerong. With Bunnerong, they sent all the communists – all the agitators and troublemakers….

MERLE: And all the blokes that didn't play nicely with others ended up at Wangi.

JIM: It was a three ring circus at Bunnerong. They used to put meals on. For three and sixpence you got a big meal, and the tea was in big pots with the milk already mixed in it. You'd get your meal, and be about to sit down, when you'd hear: "Brothers, we've got to have a meeting, …" and everything had to stop while they had this meeting. But we would get our meal out go to the gardens

MERLE: Wangi garden were like that too. See they always had gardeners – true gardeners, people who had horticultural degrees were the gardeners there, in all of the stations. The gardens were magnificent, though they're falling apart now, of course.

JIM: There's lot of land there at the Wangi station…

INT: Probably worth quite a few bob…

JIM: Well, do you want the official version or do you want… some of this might prove hard to repeat. They spent thirty million just getting all the dangerous materiel out of the place, and then they decided to sell it. They sold it to a bloke called McDonald. I could never work out how this bloke came into it … not just the land in the power station, but the whole shooting match. He tried hard to do deals with the Council because he wanted to subdivide all the other side of the place, and he wanted to put in a big theatre complex cum convention centre where the power station is. You're not allowed to knock it down, and now they're stuck with it. The Council wouldn't play, and they wanted the project backed up first, before they'd let him subdivide, because they thought that if they let him subdivide, he'd go off and leave them with the station.

MERLE: Which he would not have done.

JIM: Then he said to the Council that he wanted to put a marina in down here near the open canal. And where the football ground is, when the lake comes up it all floods, because it's all swamp. He wanted to give them the land further up, and take that land to make a dry marina out of it.

MERLE: Until his death, he maintained it.

JIM: Yeah. He had a gardener there full time maintaining it.

MERLE: But I got the feeling that he stopped being their mate when he got hold of it, because he really did want to…

JIM: He wanted to, but the thing is, the council then dug in on him and wouldn't let him develop it. So anyway, a couple of years ago he died. Next thing you know they closed it all up, and every couple of months they'd come and mow the lawns…

MERLE: It was full of foxes, and rabbits, and feral plants and animals…

JIM: And last Monday someone set fire to the place. One fire engine turned up, and I was wondering how they were going to get in. Easy. Boltcutters. Then three more engines and the ambos turned up, and we couldn't work out what was going on. Next thing, they're out here looking for the water stand pipes, because there's no water on in the power station.

I got dressed and went out to see more, and a young girl told me that there was a fire in the power station itself. I said I couldn't understand this as it was all concrete and brick and nothing would burn. She told me that apparently there had been squatters there.

MERLE: The school kids used to get in there all the time.

JIM: Yes, there's graffiti and all sorts of shit in there now. That was never there when McDonald was alive. Since he's died the security has obviously slackened. He had sirens, sensors and all sorts of security stuff set up…

MERLE: …and dogs.

JIM: All that's gone now, and apparently the squatters got in and set fire to it.

MERLE: But there was no smoke. You can see how close we are to it, but we couldn't smell anything or see anything.

JIM: According to my understanding there is a heritage order on the power station and chimneys.

MERLE: They're a gorgeous piece of industrial architecture.

JIM: It's the only station of its type in Australia, and it's very, very unique in the way it's designed.

MERLE: There's this wonderful sweeping circle, all glass and everything – right up high. That was where the power station superintendent was. All the bigwigs were up in there. They didn't interact with the workers much, although I must admit that there was a guy at Eraring who was great. He was lovely. He just lives around the corner. I remember it was my 50th birthday and he came up to me and asked me if I was OK with what was happening, because these bastards had gone out in the middle of the night and put huge signs up all over Eraring power station saying that Merle had turned 50… and everybody knew Merle!

The only time I'd speak to the operators was if I made a mistake with their pay. You see, they're on shiftwork, they've got nothing to do with their time, and

nothing happens in the middle of the night, so they work out that they're a cent short in their pay and they'd come and annoy you.

JIM: You know all this performance that's going on at the moment over the power lines? Who's going to buy what and they're trying to sell it? You know what that's all about? It has nothing to do with power. It's communications. All the cables, when we put them in, they've all got fibre-optic running along the earth line. That line that runs along the top of your normal 330 line is fibre-optic. So there's a fibre-optic backbone on all the power lines running around Melbourne and Victoria. This is what they're after, and it's worth millions and millions as a communication system. They don't want the power lines. They want the communications system.

There's already an NBN line running right around Australia. Telstra put a backbone system in ten or fifteen years ago, but it doesn't go to local consumers. When they put in the coaxial cable systems, there's a coax from Sydney to Brisbane, and a coax from Sydney to Melbourne.. All the holes had been dug, and the pipes had been put in, so it all they had to do was to put the fibre-optic through the existing coax cable stuff. Coax cable is much bigger than the fibre-optic

The first fibre-optic stuff we put in was from Eraring down to Kemps Creek. The 500,000 line. They did test runs of the fibre-optics and found it was shit-hot. So that's why they're after the poles and wires.

MERLE: I don't understand why they're always privatizing stuff – and its always the stuff that makes a profit. They have to pay their shareholders so they don't do any maintenance and the whole thing falls apart.

JIM: So it's the fibre-optic they want. You imagine, if they had to put that fibre-optic in they'd have to dig a hole in the ground for starters, and imagine the yikes and scream that would go up. The cost 'd be phenomenal. But we're getting off the topic here.

Int: Why did you choose Wangi as your base, given that you worked at so many other stations?

MERLE: Well why wouldn't you? It's such a nice place. Originally, when Eraring was built, we had young children in school and everything, I could have lived here easily, but Jim always had trouble.

JIM: See, I couldn't get out of state control at Carlingford. But Merle was the one who commuted. She stayed at hotels and pubs and such. We had 5 acres at Maraylya. I had a Commission vehicle and I would drive it into Carlingford and work shifts. I had to cover all of NSW.

MERLE: When I first came up here, I was up here 18 months before Jim was. I lived in a caravan park and went home of a weekend. It was great fun. I loved every minute of it.

My youngest was 16, and he came up here with me because he'd been hit by a car and smashed his leg up… I was 42 at the time. We've been living here for about 30 years.

When they closed the station it didn't affect our lives very much at all. I went to Eraring, but not to the station, to the training centre. I was a computer trainer-up. I was still a timekeeper, but… The Commission actually had a brilliant time-keeping program written by their own programmers. It was called "Time and Attendance", and I was involved in the development and the training for this particular computer program.

I was the oldest person there. Everyone was in their thirties, and I was in my forties and fifties. I started in computers in second generation computers. The first computers I ever used, we had time-share in the front. By the afternoon we'd have put all the information in, and then it was sent to Minnesota, because that's where the computer was. We had punch cards, and punch tape. I used to be able to read them. Put it in front of me and I'd be able to tell you what was on it. Mind you, I couldn't tell you a word of it nowadays. And I'm losing it with the programming. I can't program mobile stuff…

JIM: She trotted off to TAFE and did a Diploma in web design…

MERLE: … and I also have an advanced diploma in ceramics. It's all because I love chemistry. The best part of the ceramics course was the chemistry.

JIM: They were scared of you because you had too much on 'em.

MERLE: Yeah. That was the funny thing. People think that timekeepers know how much you're earning. Now I used to pay Jim… and I didn't have a bloody clue what he was earning! They're just numbers, they're not money. You do all these numbers, and you put them through the computer and they come out the other end, and someone will ask how much they are earning. And how would I know?

JIM: Back in the god old days when they paid you cash, the guys used to pocket so much for their pocket money and give the rest to Mama, but Mama never knew how much they were earning. A lot of the older guys in Wangi thought that Merle knew how much they got paid.

JIM: The linesmen used to go away on Susso (sustenance) and repair the insulators and everything. They were paid good money, but they'd come home and the wife would ask them where the money had gone, and they'd say that they broke some insulators or something. And the wives would believe them!

MERLE: A lot of women are just so bloody stupid! I was lucky. I had a mother and a father who believed in education for women. My mother believed in it because she hadn't been educated, and my father believed that everybody was equal, and so you educated them, so I was very lucky.

JIM: When they were cleaning the place out, they found a body in one of the boilers…

MERLE: I thought it was in the chimney…

JIM: Well, it was somewhere in that section.

MERLE: They think he was an itinerant who went in there to get warm. It was a very old body…

JIM: They think it was there when they were building the station.

INT: And was Wangi power station a good place to work?

MERLE: Oh wonderful. I'd look forward to going to work there because of the people. I didn't like working in Sydney very much, when I was in Head Office, but once I got on the road and started doing things it was just wonderful because you would meet all these people, and they were always nice, and they were always helpful.

I never had any trouble with the management. I probably had more trouble with the office staff. I'm an office worker, and I thought they were a bunch of …. I'm not going to use the word…

JIM: There's another power station up at Liddell. Liddell is the dirtiest power station. They burn all the rubbish coal there.

MERLE: At one stage there I put in for a coal plant operator's job, but I didn't get it. I was too highly qualified, and I was female.

Another time one of the coal plant operators came up to me and said: "How would you like to have a drive of a D9?', and I said that I'd love to. He said: "OK then. Do you want to come and do it now?" I can remember I was wearing a black suit with a white shirt and red high-heeled shoes. He said: "No. You're alright. C'mon, we'll go and do it". And I actually drove the D9 for about half an hour.

JIM: They're big bulldozers, but the blade's about thirty foot wide.

MERLE: The payroll system was a huge old book, and then we got computers…

JIM: When they set up all the power stations initially, Bunnerong belonged to the railways, Pyrmont belonged to the railways, White Bay was the council, and Balmain was a private power station. They were all individual utilities. So the Commission took over the lot. The bloke who ran the Balmain power station was the first Chairman of the Electricity Commission, and he had power over all the other ones. But the Balmain power station were given a big pay rise just before the Commission came on the scene, so the Commission had to match the pay

rise for all the other power stations. This guy wasn't a bean counter, he was an engineer and he knew his stuff, and he knew how to handle people, and from there on in…

MERLE: Once the bean counters get in nothing matters but the bottom line.

JIM: Anyway, he was the one who started the whole thing up. He had the foresight to set up the substations and start getting the power stations together, and it really was a magnificent organization they set up. They set up in Rannon House originally, then they moved to where they had the American Embassy on the floor above. That was fun, after hours, when I had to come in and check things…

MERLE: It was even more fun when they had a bomb scare and we had to walk down thirteen floors!

MERLE: But as a result of all this our salaries were very good.

JIM: The work conditions were very good. They brought in the 35 hour week…

MERLE: Thirty seven and a half hours. You were on 35 hours because you were shift work, and I was on thirty seven and a half.

JIM: We got four weeks annual leave, plus shift loadings…

MERLE: They were one of the first to have maternity leave.

JIM: The Public Service Union was pretty strong, and if they rattled the chain enough they'd usually end up getting what they wanted. And the ETU – they were the two good ones. The there was the Miscellaneous Workers, for the cleaners and labourers, and they all combined. They'd go through the ritual of negotiations, but there were no real fireworks. The place was making money, and they were building

Int: Were there any light-hearted moments associated with your job?

JIM: Like the time they caught the bloke blowing the sub station up?

MERLE: Yes, that was good fun.

JIME: The only time a bomber got loose in Sydney – he was blowing subs up because it turned out he just like throwing switches. He was nuts. But the thing is, no-one knew who he was or what was happening because he blew Dundas sub up, ! Everybody was getting very upset about this character. I was over at Carlingford, a 133/33 substation – – and the state control centre was over on the other side –that was my base, and a operator called Bob Friend rang me up from Sydney West, which controlled Carlingford, and told me they were getting all sorts of funny discrepancies on their circuit-breakers. So we had a look at the supervisory system and everything looked all right. So I said I'd go up into the control room and check it out, and here's this bloke up there turning all the

switches! What he didn't know was, that to operate them you don't just turn them – you have to push them in and then turn them. If he'd know how to do it he would probably have taken out just about all of Sydney! But just turning them accounted for the discrepancies Bob was seeing back in Sydney West it turned out that this person was deaf and dumb

I was wondering what to do next, as I didn't think to bring a phone or anything with me. I didn't even have a pencil and paper, but there were glass panels so you could see in from the control room, and I ended up writing in the dust on the glass! And I dared not go anywhere, and I decided I had to get to a phone to get some help.

Eventually I got near a direct line phone, and Bob twigged that something was going on because I was talking very loud. He phoned the police, and they said they'd be there in four to five hours! So Bob got hold of one of the council line gangs… see there were three keys: PS 3 was your high voltage key, SS3s were the country keys. There was a whole sequence of key numbers, and the higher the number the higher the authority you had to have to get the key. SS3 was Substation stuff, and the PS3s were power station ones. Anyhow, the line gangs had a key once they came over I was right., and I could get on the phone and tell Bob what was going on.

OK, so we had the coppers coming—eventually – so we took him down and locked him in the Communications Room. At that stage, management turns up on the scene: "OK We'll take over from here. We don't need you any more". I never got a mention in dispatches, and these blokes were the heroes of the day. Gee, I was cranky over it.

MERLE: I had a supervisor like that once. We never went out to Broken Hill, but we used to check their payroll book . I got banned from Broken Hill because of the Barrier Council -- the timekeeper out there was running a scam, and everybody knew about it. I wasn't in on it, so I got banned by the Barrier Council.

I was also the third woman timekeeper in the Commission, and Pyrmont power station wouldn't allow female timekeepers to go over there. If you worked in the Commission in Head Office you got no allowances, if you worked in a Transmission area you got transmission allowance, which was about ten dollars a week, and if you worked in a power station you got power station allowances which was about eighteen dollars a week, which was fairly reasonable. And we weren't allowed to go to Pyrmont. We were about five women at that stage, and we kicked up a stink. They said that there were no female toilets there, and we said that we didn't care, we'd share the toilets with the men. "We'll go in a stall and we won't watch while you're at it" I said. Eventually we managed to get to go to Pyrmont, and we'd been there a few years when this bloody stupid woman – with a university degree and all the rest of it – came in and declared that she couldn't go anywhere where there was no ladies toilet. So we got banned from it again! They were so up themselves.

(long digression)

MERLE: We've had a good time working, really. The Commission were a good bunch to work for. They used to have a social club that you paid bugger-all for. They had flats up at Port Macquarie that you balloted for each year and go there to have a holiday. Everyone who worked for the Commission was entitled to it. They also used to have a Commission Picnic Day, and a camp where everyone went to the Sports Day. It was a very social place.

JIM: The bloke that started it all up wanted to keep it like a family.

MERLE: And the management would turn up at all these social functions. If you think about it, the miners in England all had these social clubs – I think it was a carry-over from that sort of era. It's a shame we've lost that community spirit.

Int: When Wangi closed, did you stay working for the Commission?

JIM: I wasn't working full time at Wangi. I was all over the place. All the time.

MERLE: And I was at Waratah, which is in the Newcastle transmission area. It's behind the Uni up there. And then I went to ERRO – Eraring Regional Recruitment Office.

JIM: In the end we got the golden handshake. They kept changing the names. First it was Pacific Power, then it was Transgrid – every day you'd come in and it would have a new name. It was terrific – every time they changed the name you got another uniform! Prior to that they decided that all wages staff should wear blue, and salaried staff were to wear khaki. I used to dread going to Liddell power station. We'd have to go and check out all the stuff around the power station, and it was so dirty. And if they saw me coming, wearing khaki, they'd get the hose, and I'd end up covered in the stuff. That was their idea of a joke. It was because I was wearing the salaried employees' colour.

MERLE: There was a definite distinction between salary and wages.

JIM: So in the end they figured out that it would be better to put everyone in the same coloured uniform.

GROWING UP IN WANGI AND WORKING AT THE POWER STATION

Photo: Bottomley

Interview with Ron Turvey
January 26, 2016

INT: It must have been a paradise around here when you came here to live at the age of twelve…

RON: It was. But the roads were really terrible. They were as rough as blazes. And the road through Awaba -- the road that ran parallel with the railway line from the Cessnock turn-off to the bottom of the railway station – they called that "the mad mile" and the windows almost used to fall out of the buses! The passengers had to hang on very tight, it was so rough.

We bought this place for 1,900 pounds, and it's 1,600 square metres, so we paid a bit over a pound a square metre. We could have bought all the land around

here because it was all vacant, but we just didn't have the money. But I did buy a block of land up here a bit for a hundred quid, and a few months later I sold it for a hundred and fifty quid. See, a lot of the engineers and staff from the power station bought property around here, and when Wangi was finished and they left to go and build other power stations, they'd offload their land from here and go and live where they were building the next power station.

Photo: Bottomley

Ron and Meg Turvey's house

I went to school at Morisset. We used to catch the bus. Lyle Fennell had the bus service in Morisset, and he used to cut through to Wangi Point. He'd bring all the workers down to the power house from Morisset and Dora Creek and all around there, and after he dropped them he went on to Wangi Point to the caravan park and picked us kids up on the way back. But in those days there was not yet a road bridge at Dora Creek, and, you know when you get down to Myuna Bay and there's a road goes straight up along the edge of the lake over that little bridge? Well, we used to go along that, through Myuna Bay, up past the school and down into Muddy Lakes to get to Dora Creek. Then we'd go under the rail bridge at Dora Creek, the past the (now empty) fish shop that used to be the butcher's, past the Workers' Club, and then around through Avondale, and Cooranbong, around into Morisset. Those roads were pretty much all gravel then, and when it rained, often the bus just couldn't get through, and we couldn't get to school often in times of heavy rain.

In those days there were some real characters, let me tell you! There was a bakehouse there at Dora Creek in those days, and some of them, when we'd get to Dora Creek – even the girls, 'cos some of the girls were pretty rough, you know -- and as we'd pass the bakehouse someone would yell out: "What do they do in

the Dora Creek Bakehouse?", and everybody would yell out: "Make tarts rise in the centre!".

We'd go to Morisset to the school dances in the back of the local grocer's truck, and, because most of the roads were gravel, when we'd get to the Community Hall (which they're talking about knocking down now) we'd all be covered in dust. In our hair and everywhere.

We had a woodwork and tech drawing teacher at school who was the spitting image of Jimmy Durante, and just as funny. The only thing I was any good at was tech. drawing and woodwork. He had all his pieces of rosewood, and cedar and merante and mahogany and all that, and he wouldn't let anyone touch them, only the ones who were really interested in what they were doing. Later on, when I was doing the horticultural certificate at Charlestown and was a gardener at the power station, you couldn't use common names for all the plants – you had to use the botanical ones. And you'd get names, like for that tree up the back there which is grevillea robusta. Now you try and spell that if you're not a good speller!

When we came here, Dad was an electrician in the railway. See, the railway started Wangi powerhouse, and the Electricity Commission of NSW hadn't been formed. All the way up the hill behind the powerhouse was all tents, and the only solid structure was the single quarters. Dad and some of his electrician mates wired up the camp, all the way up the hill. And when the Electricity Commission was formed, Dad went to Awaba State Mines as an electrician. When we first came here we were living in a boatshed up at Wangi Point originally, and they were digging out for the foundations of the power house when we got here.

Wangi was a friendly station. We had a lot of blokes there from Bunnerong, White Bay, Pyrmont, Tallawarra, who were on temporary transfer. There were some real characters amongst them, like from Redfern and all that – you know, real rough diamonds. One of them would go around the concrete parts of the station with a piece of chalk, and in copperplate handwriting he'd write "The end is near", or "repent". He should've been a signwriter.

Our truck driver used to pick up a whole lot of vegetables from the market at Sandgate and bring it back to the station and we used to bag it all up, At the Ash Plant they used to put in money, and every Wednesday one of them would cook a baked dinner. The Superintendant, Jack Chiltern, was walking down past it this day and smelt this delicious smell. He looked in, and here's Big Steve cooking a baked dinner in an apron with a woman's anatomy on the front of it!

If you were out in the Switch Yard you could look up and see someone lowering a fish trap from B Section into the outlet canal. There were bream right up to the end of the outlet canal. (A lot of them were a bit undersize, but that didn't seem to worry 'em!).

They had a massive amount of strikes at Wangi, and at times it was really hard rearing a young family. I had a mate I went to school with, Kenny Jacobson,

and his family were fishing out of Dora Creek, and they kept us supplied with fish. We had a lot of strikes, and I dunno what we would've done without the fish from Kenny Jacobson and his brothers. During a strike, people would donate food to you.

We had communists at the power station, and they used to distribute The Tribune. Most of the union delegates were communists, or a lot of them were. I couldn't say exactly how many because a lot of them didn't broadcast it if they were. In those days they didn't have a real good name, a lot of them. The strikes were mostly over wages and conditions. When Pat Hills looked after the power industry Labour was a bit hard on us. But most of the strikes were about the 35-hour week, our holidays, our sick leave, and our conditions. We had to fight for every one of them.

One strike we had, we had tents at the gates, and we were stopping all the supplies from coming into the station. We were boycotting the station. One of the strikes went for about six weeks -- that would have been about the biggest one, I think -- but some of them only lasted a few weeks. Some of the strikes were really silly. Whenever we had a mass meeting we'd meet outside the gate, and the majority of the blokes would bring their bags out with them, because they had no intention of going back to work. One time they voted to go back to work, so one of the blokes said: "Look. It's a beautiful day, and you can go back to work if you like, but I'm not", and he started off home -- and they all followed him out the gate! A lot of times the combined delegates would put up a motion which might be defeated. So then they'd circulate amongst the rank and file and talk to them for a while, then they'd come back and put the motion in a different form, but it was virtually the same thing – and it'd pass! It was hard at times, because a lot of us were rearing young families. I was lucky in a way, because my wife cleaned the school, and the money that she got from the school helped us out, but a lot of them would have been really battling if they were just on a single income.

We had a lot of amateur painters at Wangi, and once a year they used to put their paintings around the walls of the mail room, and Bill Dobell would come over to look at them, and he'd give them advice about painting, and a lot of the amateur painters used to look forward to the day when Bill Dobell came over to have a look at what they'd done. I worked in Construction at the station before I went to Generation, and I worked with Bill Dobell's nephew. His name was Harry Stephenson, and he was Bill Dobell's chauffeur. He took Dobell to Canberra when he got his knighthood. (They pub crawled all the way to Canberra and back).

Sir William had his own little corner at the hotel, and after he got his knighthood a lot of the wits would come over to him and bow and say things like: "And how are you, Sir William?", and he'd say: "The name's Bill, mate". He definitely didn't have any tickets on himself. The knighthood didn't make the slightest bit of difference to him. He liked his beer. I used to see him there a lot, but I didn't ever get to have a drink with him.

Anyway, Harry lived over at Lakeview. He was a terrible father, and he virtually

dragged the children up. And Harry's auntie was Bill Dobell's sister, and Harry was driving his auntie to Sydney in the Jag – that was Bill's car – and she was really giving Harry the works over how he was treating his kids. So Harry wheels in to Mt White railway station. His auntie asks him where he's going, and he said: "I'm catching the train home". And he left Bill Dobell's sister and her friend sitting in the Jag, and neither of 'em could drive! In the end Bill Dobell sacked Harry as a driver and got another one of his relations, because a lot of times Harry wasn't sober.

With Bill Dobell… when I was in construction we were spray painting all the transformers and OCBs and I was working in the switch yard with a painter and he was a beautiful artist. He used to put paintings in the Mattara and Bill Dobell used to think that Noel was really something. When it was raining and we'd be in our little paint shop and we couldn't do anything, I'd get all these little pieces of paint and I'd start painting. It'd look like something that a five year old would do, and Noel would get a paintbrush and say you do this and this, and he'd make a good painting out of it. He did a painting of his wife Dawn. She was quite an attractive woman, and she was in a black dress and had a pink orchid on the front, and it looked beautiful.

When you were out there with the air switches, they were only about as high as this roof here, and when it was fine drizzly rain she'd be crackling and going on and one chap said to me that in conditions like that you could jump six feet. He died here just in the last few weeks. His son was a foreman fitter there. A mate of mine who was an engineer there and who's 90-odd told me that the chap who died had told his son that when he died, to go round all the mourners and put a stamp on the back of their hand, and when they go to the morning tea or the supper, make sure they've got the stamp before you let 'em in! And he did! He stamped them all on the back of the hand and checked them off when they went to the wake afterwards.

I was a gardener at the power station there for a while. When they sold Maitland power station, the bloke who looked after the gardens there came down to Wangi and worked there with me. The netball courts there were all grass, and we used to mow them with the little ride-ons. I had a mate who lived at Morisset, and he was the fitter and turner who used to maintain our gardening gear. He came over this day and asked where the Ransome ride-on was, and we told him that Stan had it up on the netball courts. He said: "How long has it been up there?" and I said: "Two hours". And he replied: "I suppose you know that it's got no blades on it?". I won't name him, but he was one of the dumbest men I'd ever struck. But on the whole Wangi was a really happy station, and a lot of us who left Wangi to go to Eraring were really sad to leave Wangi.

When I was working in construction with Bill Dobell's nephew, we were cleaning up after Arcos, who did the brickwork, Parsons, who did the turbines, Babcock and Willcox who did the boilers, Centrifugal (mainly Italian and French) who did the outlet canal. The outlet canal was a record because they put it in in really quick time, and they put in right through a swamp. It was really an engineering feat.

When we cleaning up after the contractors, we were told that anything that was not bolted down, to throw it up on the truck, and it was then dropped down on the football ground at Wangi, where the bulldozer covered it. There were brand-new valves, brand new everything, and it was all covered over, Underneath that football field there would be thousands of dollars worth of gear.

My wife and I have had five caravans, and we've been across the Nullabor a couple of times, and we've had winter in Cairns and all that. In the 52 years we've been married, we've always been going to move from here, but we've never got around to it. It's really quiet here, and even to go to Newcastle or Sydney it's quite a shock because of the traffic. We love the birds, we love the trees here, and we had a friend who has passed away always used to say to us never to sell because were are living in a little piece of paradise. And she got that right.

I met my wife Meg at a tennis court at Blackwell's Park. One of the painters at Wangi owned a tennis court there, and Meg took me home to her parents just over here at Balmoral. Her parents told her that I must be poor, because I had no laces in my boots – they were tied up with electrical wire! We wanted to get married, but she had to wait till she was 21. I asked her father for his daughter's hand in marriage, which a lot of them don't do any more. We've had out ups and downs – I had stomach and lymphatic cancer fifteen years ago. They only gave me five months to live. I had twelve months of chemo and radiation, mostly at the central coast at Wyong, Kanwal and all that. I used to get up early and work in the garden, and then go to have chemo and radiation. When the surgeon at Wyong told me I only had five months to live, I turned around and I was determined that I would prove him wrong – and I have. I'm supposed to have five small meals a day because they took my stomach, and made a sort of pouch for me. I tell everyone that my stomach is down at Wyong hospital – though I think they got rid of it years ago. We've got six grandchildren, and the saddest, the hardest part was to see children going through radiation and chemo.

It knocked me around a bit. I was in a cancer support group at Wyong Hospital. A lot of those were survivors. They told me to use crystallized ginger and cut it up into small pieces and suck it, which helped a lot and settled me down. I'd taken ammonium when I started to get diarrhoea and that seemed to clear that up. But the people in the cancer support group were very helpful. They'd been through it, and they were very supportive.

I got the cancer after I'd retired, but I'd always had trouble with bad nerves, and I had eight months in Shortland Clinic, which is closed now. I'd been seeing a psychiatrist down at Dora Creek, and Dr Darcy was a nephew of Les Darcy, the boxer. I was working at Eraring by this, and they offered redundancies when I was 55, and he said that he thought it was time I retired. So I've been retired for 22 years – and contracted the cancer 15 years ago. A lot of my troubles were caused by worry, but I also thought that a lot of the chemicals I used at Wangi like chlordane, dieldrin, lindane, hexachlor might also have had some effect. When we first moved here there were a lot of advanced fruit trees, and I used lebaycid, metacystox… and I wouldn't be surprised to find that a lot of the cancer was caused by the chemicals. We used to spray the lawns at Wangi with chlordane or dieldrin, and the crickets and the black beetles used to fairly jump

out of the ground. And I used to get massive headaches from it. They're all off the market now, of course.

When I was a chemical sampler, I used to do the injections into the boilers. I used to look after the softeners and the filters. The water that goes into the boilers has got no oxygen and no minerals in it – it's specially treated. I would have reciprocating pumps, and I would take a water sample with a coil very similar to what they use to make whisky – and I'd take a sample and give it to the chemists, and they would say that you've got to put so much trisodium phosphate, so much sodium sulphide, so much morphelene (?) and so much calgon into it. And with these reciprocating pumps I used to pump it in against boiler pressure. So I'd go to the auxiliary plant attendants and give them my little card, and tell them to close 1A chemical injection valve, and open 1B. And they'd give you a wave to say that the valves were open, and then I'd start the pumps and pump it in. I'd push distilled water through to make sure all the chemicals got into the boiler drum.

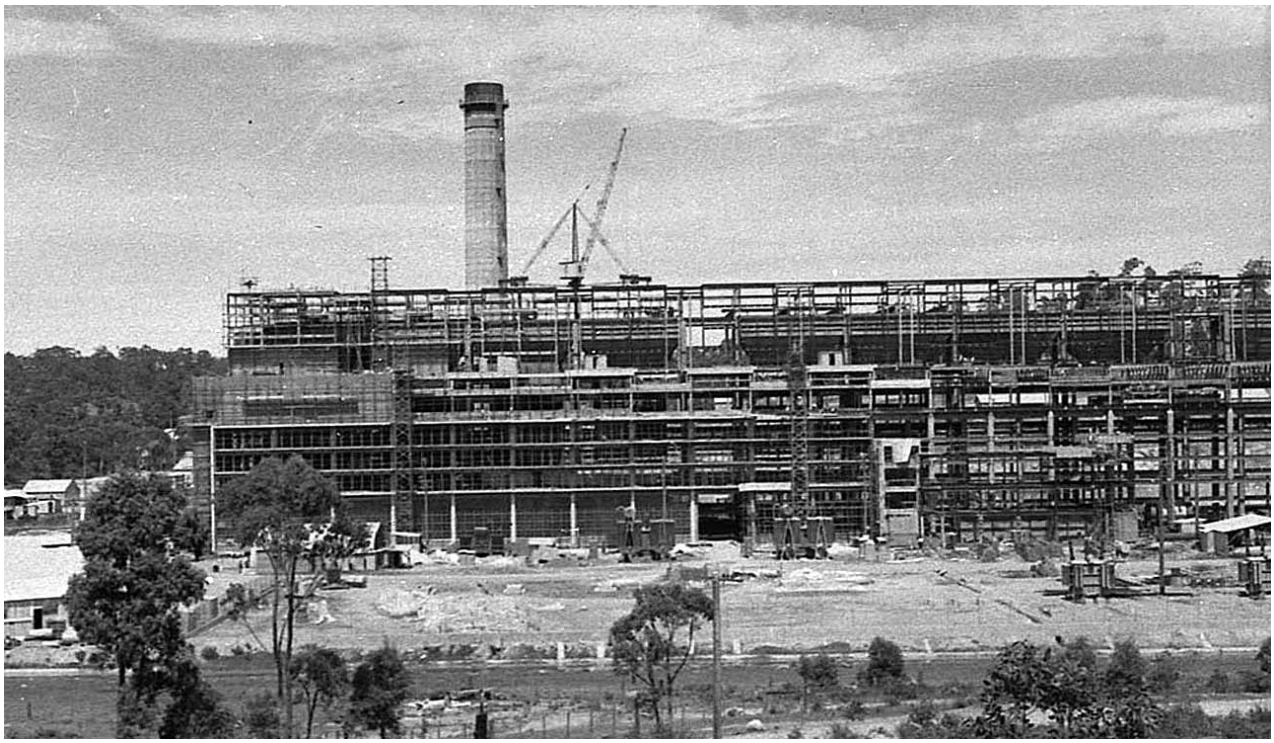


Photo: Wiki commons

Wangi Power Station under construction

The way the power station generated electricity was like this: In A section there were six boilers. The coal was up at the top of the stack, just the way it came from the mines, and the stokers would flip the coal down onto the grate. The grate hat rolled over backwards and took the coal, and by the time it got to the back of the grate it was burnt, and the ash would fall into the ash-hole. The grate had all holes in it and fans used to blow air up through the holes in the grate. The walls of the boilers in A section were all tubes, and the water would boil and it could flash over into the boiler drum as steam. Then it would come down through the three stages of the turbines and then down to the condensers, and because you can't pump steam, by the time the steam went through the

three stages of the turbines and the condensers, the salt water from the lake was on one side of the tubes and the steam on the other, and the cold water from the lake turned the steam back into condensate. Then it would go back up into the boiler by condensate pumps, and around and around it went. The three stages of the turbines had a generator on the end. They were 35 megawatt Parsons generators, which were only small compared with a lot of the bigger stations now. Eraring has four 660 Toshibas.

B section was different again. It didn't have a grate in it. The coal was ground – it came down into the mills and big steel balls rolled around and crushed the coal as fine as talcum powder, and the fans picked up that fine talcum powder coal and blew it into the boilers. It was just like internal combustion in a car engine – it was exploding all the time and the spent coal dust was going down into the ash hopper. The whole lot, from A section and B section, was being pumped as a slurry with salt water from the lake down to the ash dam at Myuna Bay. The only thing that didn't finish up down there… they had the precipitators that used to pick up all the burnt coal dust out of the flue gases. They used to pick it up in big tankers and use it to mix in with cement. I/m not sure how it worked as an additive, but I think it used to make the concrete go off slower. So the tankers used to come to the station and pick up all that fine fly ash.

So B section was pulverized fuel, and A section was the coal that came from the mines. Awaba and Newstan were the main collieries, and we used to get some coal from Sugar Valley, but not a lot. The big Garrets used to come in with that. They used to pull three 5BCHs (?). They were a hundred tonne each. They'd split 'em up into a 12 and a 25 BCHS. They'd shove them over to the fuel plant and the fuel men would open the bottoms of the coal trucks with big bars and the coal used to run down onto the conveyor belts and then run up the incline up to the bulk floor and then go down to the boilers. Early in the piece there were occasions when the train drivers went too far and went through the stops and finished up with trucks in the foreman's office. So they put in a system of mirrors and lights, and once you couldn't see the light in the mirror you knew that you'd gone far enough.

Ellis Brothers had trucks, and they used to bring coal in from the mines, too. The side of the coal plant was open, and bulldozers used to push the coal that had just been brought in into the hoppers as well. A lot of the time, what with the weather and humidity and that, the coal stacks used to catch fire. One time when I was a coal sampler, the yard foreman was talking to me, and a chap came with a ute and started throwing a load of coal on. The foreman stood beside me and watched him as he loaded the ute right up, and then went over and told him to put it all back again!

This was before I used to add chemicals to the boiler water. They had what was called The Family Tree, and you could have two choices. You started off as a cleaner/labourer, and you mostly were cleaning up the toilets and the meal room, and then you went as a Trades Assistant, and you'd work with the different trades. But when you were working as a Trades Assistant you had two choices, and I selected the coal sampling. When I went on to do the chemical sampling, it was just an extension of the coal sampling.

As a coal sampler, you'd take a sample of the coal as it came in and put it through the rolling mills and the crushers and the fine mills. This would take it down to about talcum powder, and you'd take it up to the chemists who would check the ash content of the coal, and they'd check the calorific value of the coal – which was a measure of its combustion properties. So that was what the coal sampler did. We'd sample it, we'd crush it, we'd put it in the ovens to dry all the moisture out then take it to the chemists in our little sample jars to see how it was. But later on when I was a chemical sampler you had to take samples from the boilers but you also had to keep filled the different tubs of chemicals that were injected into the condensate, like hydrosine and morpholine and all that – they were all round the station.

When you were a coal sampler you were looking after the coal side of it, but when you were a chemical sampler you were looking after the water side. When you were injecting say morpholine into the boilers you'd have to tell the operators because they were taking periodic readings from their gauges, and if you injected morpholine it would come up on the gauges indicating high conductivity. I think it was a kind of oxygen scavenger, too. What they did, they had to make sure that the water, as it hit those blades, didn't corrode the blades, because if the turbine blades deteriorated they had technical officers there with gauges who use to check the vibration around the turbines. If the turbines threw a couple of blades they'd start to vibrate. We were looking after the corrosion in the boiler tubes, and the corrosion on the turbine blades.

The only water that came out of the outlet canal was the water that went through the condensers, and the water that they used for washing down the floors and that. They had barriers across the outlet canal and the superintendant of the station had his window looking down on the outlet canal, and they used to keep a very close eye on the outlet canal to make sure that there was no pollution in it. The water that came through the condensers came in from two canals on the south side, and they went through the screens where all the marine life and the shell and the weeds were taken out, and when it went into the condensers it was clean. It went through the tubes to turn the steam back into condensate and into the boilers, and when it came out of there and into the outlet canal it was exactly the same as what went in. The only other things that could have possibly gone in was when they washed down the floors in the station and all that – water from the drains that didn't go into the sewage system.

The screens on the inlet canal rotated, and jets of water blasted the muck out into sluiceways, and all the crabs and weed and prawns would be out there. One after noon when we were working back we actually filled a 44-gallon drum with prawns. And when I was working at Eraring I used to drive a JCV front end loader, and I used to take it down to the screens at Dora Creek and I'd go in and get all the crabs, and all the prawns and all the fish. Down at the screens there they had a cooker, and I'd cook 'em all up and take it all back to the station for our dinner. And what we didn't have for our dinner we'd take home for our wives. All the shell and all the weeds and stuff from the screens went into landfill – it didn't go back into the lake. It was pretty smelly, but it made good compost.

As to how many the station employed, -- I'd make a rough guess at between 300 and 350, but I wouldn't be at all sure of that.

Later on some of the other stations would have contractors come in. At Wangi we had painters and carpenters on site – we had boilermakers on site. Most of the trades and their young apprentices were employed by the Electricity Commission of NSW. The only time we would have had contractors in at Wangi was later on just before it closed. They had it all repainted, only to then see the power station close! The use of contractors only came later on with the newer power stations and Pacific Power. I went to Pacific Power for a time in generation.

At Eraring, when they offered redundancies, there were a lot of chaps who had over thirty years service, like me. A lot of them took redundancies, and then the station found that they didn't have enough workers to do things like clean the facilities, and the amenities. I think they had to re-employ people to look after the amenities. But things have changed a lot since the days when I worked there.

At Wangi, apart from the gatehouse and the gardening shed and the coal plant—and the Clearspan, the big store -- everything at Wangi was under the one roof. With Eraring it was all satellite workshops, and to go from one place to another you had to go out in the weather, and you'd be either driving a vehicle or riding a pushbike. It wasn't a good station in miserable weather, y'know.

We used to have Christmas Parties at the station. Alec McMurtry was always our Santa Claus. A lot of the young kids still used to believe in Santa Claus, and he'd say to them: "I know your father" and all this, and it was a real family station. At our picnic days, our superintendant was a pretty good swimmer, and with our races he used to try and beat all the different ones in the swimming pool. It was good. It was a friendly station.

Jack Chiltern, who was the superintendant later on, had a Commission place at Fennells Bay. Tile roof and weatherboards. I was there because the ivy had run up the wall of the cottage and over the tile roof. Mrs Chiltern, the superintendant's wife, was really good. She'd bring out coffee and tea and everything. Anyway, I said to the other gardener: "Look at that dog running down the road there with all those sandwiches! You know, I think that's me lunch!" and there were sandwiches all over the road. But I didn't have to worry, because Mrs Chiltern had all this coffee and biscuits.

So many funny things happened at Wangi. There were some older chaps on temporary transfer from White Bay and places like that, and they used to torment us a bit. One of them used to target me, and one time, we had these little passenger lifts that used to break down – usually at morning tea or dinner time. The electricians wouldn't come to fix them until after they'd had their morning tea or dinner. So if you were in it on ones of those times you were stuck in the lift until one of the electricians came to let you out. One of these blokes from Bunnerong or White Bay used to really give me a hard time. I walked into the lift one day and there was just me and him in the lift – and by this time I'd really had him. I grabbed him by the front of the shirt and slammed

him up against the lift wall that hard that it nearly shook his teeth out. He never touched me again after that. But a lot of them from Redfern, White Bay, Bunnerong and Tallawarra were real characters, and we were a bit naïve.

After the power station closed down, there were several schemes put forward to make use of them somehow but none came to anything. When they pulled the turbines and the boilers out, they would have left massive holes in the floor. Those floors were about a metre thick. The Admin and the mail room and all the section down towards the lake – that might have made a decent hospital or something. It had good floors and could have been made into something. The main station itself, when they took out all the auxiliary plant and all this, it would have left massive holes.

Now I wouldn't be too sure about this, but I think Wangi was the last station to be built of brick. Arcos built it, and my mate was a brickie on that job. The brickwork was cracking from the vibration of the units, and towards the end – I know because I used to go up to the coal plant there – you had to be careful that you didn't get hit on the head with a brick. The bricks were falling out of the wall. I could be wrong about this, but I think that's why they didn't build any more brick power stations after Wangi – because the brickwork couldn't handle the vibration. Having worked there for 26 years, a lot of the suggestions that people made were quite funny. Down in the basement, where, after everything is gone you'd still have a good solid floor, that would probably make a good mushroom farm or something like that, but for the rest of the station it would be really hard to do some of the ideas that they came up with.

The station had a lot of asbestos in it. I've got asbestos in me, and a lot of them died from asbestosis. I've got pleural plaque, which shows that I've been exposed to asbestos fibres. We weren't told till later on just how dangerous asbestos was, and when we were told they went in with the barriers and the plastic bags, and buried it. The boiler doors had blue asbestos, which is the worst kind of asbestos. Some of them got fairly good claims but they didn't live long enough to really enjoy the money they got. We did some really silly things with asbestos before we realized about it. I mean, we used to throw it at each other! Even though I had plaque on the lungs I was told that as far as they were concerned it wasn't compensatable. I had all the paperwork sent to a solicitor in Newcastle, and they told me that when I started to get short of breath to come back then and they'd make a claim for me. We all got tested for hearing, and some of them got a few hundred dollars. I got a few hundred dollars for loss of hearing due to all the noise we worked in. The stokers and the turbines and the fans were noisy, and if you were working in the station all the time you were working in continuous noise.

One thing that always intrigued me… they reckoned that the biggest change to the power industry (which is a grid system)… some people think that a station provides power to one particular site, but it used to be that Carlingford was the central control and it controlled the distribution of the power throughout the state. And when you get something like Melbourne Cup Day, when everyone turns off their machinery, the load drops right off real quick. And because the shafts in the turbines are big, and run on white metal bearings the same as

in your car, they'll sag between the bearings and when turbines are not going the shafts are still turning slowly so they won't sag. When they drop load, the superheated steam from the boiler goes down through the condensers and turns into condensate which they can pump back in, and it bypasses the turbine altogether. If you let the boiler get cold then heat it up, then let it get cold again, they deteriorate a lot quicker. With the big stations now they're going all the time.

Photo: Bottomley

Wangi Power Station in 2016

When the load goes up on a hot day when everyone's got their air conditioning on and a turbine is on barring gear, they'd open the valve and the steam would come straight from the boiler and through the turbine and away it goes. (A lot of this technical detail may not be right on, but it's as good as I can remember).

With the power stations, especially for someone who's not a tradesman like I wasn't, you do a lot of different jobs. We got an internal ambulance when I was at Eraring – a F100. I worked for the first aid as a cleaner, and if there was accident at the station I would ring up the group, and ring the alarm, and tell them where the accident was, and they'd go out. Then I'd ring up an ambulance from outside, and ring up the gatekeeper to tell him that there was an ambulance coming. The F-100 had a Stokes litter (stretcher) and an Oxyvivor and all the first aid gear in it. I'd worked in garages before I worked for the power stations so I used to take the ambulance for a drive, and I used to maintain it.

There was one chap I used to work with, I went to High School with him and he was in my class, and because of the grading of drivers, the grader drivers in Eraring used to complain about me driving the ambulance because I wasn't

a graded driver, although I'd been driving the JCB out to the screens because I had my ticket to do that. So this day this foreman waved me down, and I thought: "Ah yeah. Here it comes". And I said: "What's the problem, Jim?" and he said: "Ron, I'm feeling a bit weary. Can I lay down in the back of your ambulance and take a nap?" So he wasn't particularly worried about these truck drivers either.

There were quite a few minor accidents, but there was quite a major one when a couple of young chemists were killed down in one of the tunnels. I'm not too sure of the facts here, but I think two died and another went down to help them and died too. It was either carbon monoxide or methane, I think. I can't remember now. There were a couple of bad accidents at Wangi when it was being built. One chap fell onto the reo mat and a reo rod went through him.

We had white tape barriers on the OCVs and transformers and they had earth sticks on the wires to take anything to earth that might be in them. And the white tape barriers around the transformers and OCVs was to tell you which one was dead – which one was isolated. You had to fill a form in to say that you were going out into the switch yard, and the chap who controlled the electrical control room, he would look down and open the gate for you to go out into the switch yard. Well, he came back from his meal break and climbed up the wrong transformer, and he copped 35,000 volts.

That was the two major ones, and there were a lot of really minor ones. Once when we were going to school, the steel up in A section, all the RSJs, were leaning up against a stack. Another time there the turbine, instead of being a generator, it became an electric motor. They usually operate at 3000 revs, but it went way past 3000 revs and shattered some of the windows in the station. The operators just took off – ran for it.

One thing I'll never forget. We came to work, and the safe from the pay office was sitting in the middle of the football ground. What they did was, they got into the station, and they got the safe – which was a fairly heavy steel safe, and they got a trolley from the boilermakers shop and they managed to get this safe onto the trolley. How they did it I'll never know. They pushed it up past the gatekeeper, and they made it to the middle of the football ground and then the trolley got bogged. And that's where it stayed. When we came to work on the Monday, here was the safe sitting in the middle of the football ground! They got away.

One thing I want to say that I thought was really funny. When Ellis Brothers from Awaba came in with the trucks, the truck drivers used to get really attached to their trucks. They really used to look after 'em – most of them, anyway. One of them in particular, even though he carried coal, he used to keep it in beautiful condition. One day a little short fat bloke accidentally backed into it. Then he drove forward, and backed back and he hit it again further down. Then he did it again, and hit it again, right towards the tailgate. That was too much for this bloke, and he ran around and wrenched open the door and pulled this bloke out and stood him up against a pile of coal and started belting hell out of him. And all the truck drivers were coming past to have a look, and they helped to pull them apart.

When I was working in construction, one of my jobs was to go around and pick up the garbage from around all the tents – from all the quarters up the hill. The hill behind the station was all tents where mainly the workers from the station lived. Some of them would use a bit of corrugated iron to make chimneys. It was a shanty town, and we used to go through there in the truck and pick up all the rubbish. One day there was a Hillman Minx there, and I'd worked on Hillmans. Some kids got into it and left the handbrake off, and there I was chasing it down the hill. I managed to get into it and stop it before it hit anything.

I had two mates who lived up there, and some of the girls we'd gone to school with were up there living in the tents. Old Tom was a very heavy drinker, and his wife said that if he didn't stop drinking she was going to leave him. So he turned around and he stopped drinking, and he grew a whole lot of beautiful vegetables. Then one night someone left the gate open. They used to bring all these horses and cows down here from Cessnock and just let them go to graze. They got into the garden and cleaned up all the vegetables, and the next day Tom was that drunk he could hardly walk! Anyway, I went up there, and it was the middle of winter and it was really cold, and someone filled up a whole bucket of water and let him have the lot! Tom thought it was my mate who did it.

So we used to get all the horses, and we'd get our 20ft prawn net and all that and we'd put all our gear on and use them for pack horses. A lot of them weren't shod, and we'd ride one and use all the rest for pack horses. We'd go down to Myuna Bay and we'd prawn through the night. When you got down the back of the tennis court at Wangi the road used to run straight up the hill, and there was a gate house further up the hill. The road was all gravel, and I was riding one horse that was a bit footsore and it baulked on me and it wouldn't move. A mate grabbed a lump of gum tree and whacked it up the tail and the horse took off up the hill. The gate was about two metres high and I thought for a minute it was going to try to jump it, but it put its legs out and propped just before the gate and I went sailing over the top of the gate, and skidding down the gravel road with blood everywhere, and the gate keeper came out and helped me, you know. We used to ride the horses that came down , and if we were growing vegetables or anything we had to fence it off.

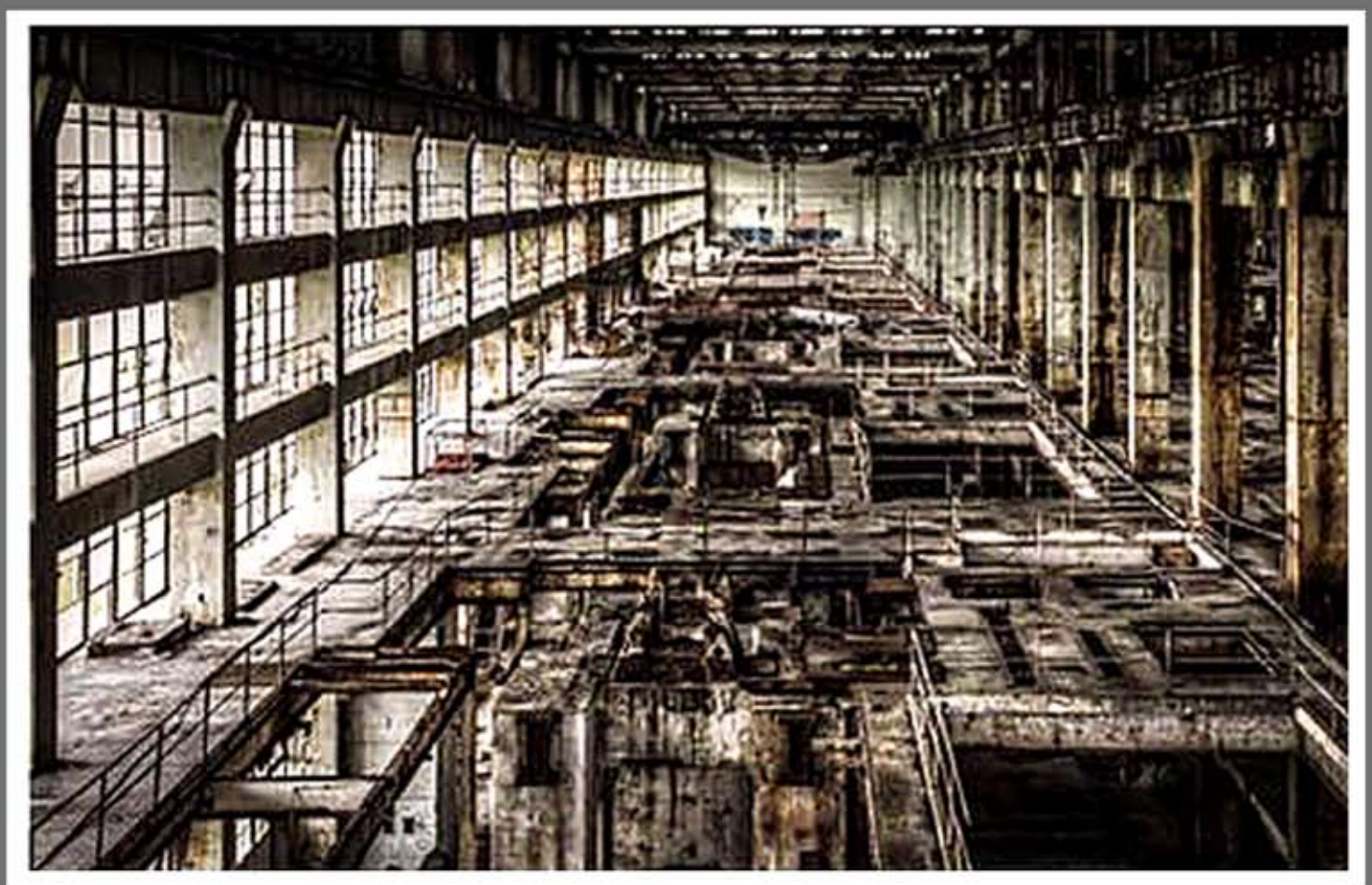
One thing I'll never forget, with the bus…we were going to school and the roads were really bad – really bad corrugations. We got to just in front of the old butcher shop at Dora Creek just before the bowling club when the stub axle on the bus snapped, and the backing plate ploughed up the road. We could have walked up over the bridge, that is walk along the railway line to get to school, which would have been about 4 0r 5 kilometres, but instead we walked home! When we got to school the next day the boys all got six cuts of the cane and the girls had to stay in detention on the verandah.

When the coal came in, sometimes it would have blue tongue lizards or black snakes in it. I was going up in the goods lifts one day, which are quite big so they could carry bulk goods through the station. I was sitting in a chair, and when I got up to get out I looked back and there was a red-bellied black snake lying dead underneath the chair. Someone had just thrown it there. Because a lot of them left their lockers unlocked they'd put a blue tongue lizard in there

and close the door, so that when they opened it a blue tongue lizard would jump out at 'em! Oh yes, there were lots of funny things used to go on.

Photos: Lost Collective

Turbine House 1982 (above) and 2015 (below)



Photos: Lost collective website