

GRANGE ELECTRIFICATION

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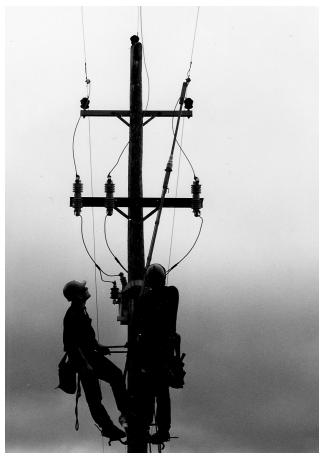
It gives me great pleasure to write this article, having spent my working life in employment with the Electricity Supply Board (ESB).

In modern Ireland, life without electricity is inconceivable. We would be devastated beyond comprehension if we lost this source of energy for any extended period. We have all, most likely, experienced short electricity outages owing to forces of nature, planned grid maintenance events and occurrences as simple as fuse malfunction.

How inconvenienced and almost helpless we can become in our homes or at places of employment when an outage of any length occurs. Just a few minutes without electricity can be sufficient to bring on fits of panic and helplessness, such is our utter reliance upon it. Electricity is critical and essential to modern day life and when we are deprived of it, we can become very unnerved as happens, for example, when a guide at the Aillwee Cave in the Burren in County Clare, turns off the artificial lighting when visitors are a number of kilometres deep within the cave. The result is utter and total black darkness that must be experienced to be appreciated; it can be an anxious and disorienting few seconds until the guide restores the light.

Some businesses, including farmers and public services (for example – hospitals) own stand-by generators (which do not require an electricity source), to provide emergency supplies of electricity. Such contingency arrangements, however, are not to be found in most homes.

The potential inconveniences that can arise from an outage are too numerous to itemise, but some that come to mind immediately include loss of – artificial lighting, boiled water for tea/coffee and other purposes, heating, cooking facilities, cooling and freezing facilities, television, and a myriad of electric gadgetry rendered useless. The modern farm, the dairy farm, in particular, relies heavily on electricity to run its operations. When the care of infants and young children is involved, it is understandable that loss of electric power can bring on all kinds of concerns, anxieties and challenges. Some of us may not have simple contingencies in place, such as the trusted candle, battery lighting, a gas-operated primus and a gas fire.



Rural electrification.

And yet, it was only in the relatively recent past that rural Ireland was electrified. Some, who read this book, will recall times in the early 1950s and earlier, when their homes were not electrified, when artificial lighting was from oil lamps, cooking was done on solid fuel stoves and cows were milked by hand. Some had to wait until the mid-1970s or later for grid electricity in the home. How times have changed!

Rural Electrification

In Ireland, the first public electricity supply scheme was established in Dublin in 1880. Various towns and parts of cities were supplied with electricity prior to Independence. However, country people (and many urbanites too) had to gaze with envy at the bright town lights from a distance and for a long time to come.

The new Irish Free State was progressive in getting the great Shannon Hydroelectric Scheme off the ground, just a few short years after the Independence of 1922. The Irish State realised (as did the USA and Germany) that the private sector could not supply electricity on a sufficiently large scale and that State intervention was required. By the time the Scheme was launched, it was the largest of its kind in the world.

In 1927, the Electricity Supply Board (ESB) was established as the country's first state-sponsored body, with the aim of operating, managing and maintaining the Shannon Scheme and distributing and selling its output on a national scale. It also got the task, which the government regarded as being of fundamental importance, of promoting and encouraging the purchase and use of electricity and of controlling, coordinating and improving its supply, distribution and sale.

In November 1944, the Rural Electrification Scheme was launched. A major national project ensued and continued well beyond the decade initially intended for the project. In fact, rural electrification happened over many decades and some of the remotest communities were not connected until the mid-1970s. The provision of electricity to islands continued into the 2000s.

In his introduction of the 1945 Electricity Bill in the Dáil, Seán Lemass stressed that a job of the magnitude of the proposed Scheme had never before been undertaken. It was estimated that providing supply to 69% of the 400,000 rural households, 280,000 in all, would be a realistic target. It was felt that 14% of rural homes (about 56,000) were so remote as to be outside the scope of any practical electrification scheme and the rest would not be interested in being connected.

In its approval of the Scheme, the government had stressed that priority should be given to the most remunerative areas, with the stipulation that, initially, one area

must be developed in each county. Therefore, to ensure early selection, it was important that the maximum amount of householders in the region would agree to take supply. To encourage this, it was decided that each parish area should have its own rural electrification committee. The make-up of these groups varied. Sometimes, they evolved from local organisations or an ad-hoc group of enthusiasts. In many areas, the local clergy or schoolteachers were very involved in the local committees. Often, local businesses helped by paying for newspaper advertisements. Every effort was made to avoid identifying the committee with any political party.

The main function of the committee was to carry out the preliminary assessment of demand for electricity in the area and to submit house-holders signatures to the ESB, and later to help re-enthuse “backsliders” – householders who had signed application forms but who, when the crew arrived in the area, had changed their minds. In some areas, as many as one-third backed out.

In all, the scheme used over one million poles and involved the construction of 75,000 miles of new line (as against the total of about 2,000 miles which previously existed) and the erection of 100,000 extra distribution transformers (as against 1,200 previously). At the peak of the project there were forty separate working units, each having between fifty and one hundred people of various disciplines involved.

Most of the poles were imported from Finland, arriving at Irish ports including Limerick. The poles were skinned and creosoted at special works in Dublin, Cork and Limerick, where they were stored pending distribution nationally.

According to *Shiel*, the team of engineers “tackled the job with enthusiasm, and with their equally highly motivated crews, achieved a rate of progress in rural electrification unparalleled in any country in Western Europe, at a cost which justified the trust placed in them. That they and their crews also earned the respect and confidence of the community among which they worked is demonstrated by the fact that although over one million poles were erected, mostly on private land, the number of disputes and way-leave objections which were not settled on the spot but which rose to boardroom level could be counted on the fingers of two hands”. By the end of 1964, supply had been extended to all 792 areas – 296,000 consumers had been connected.

Usually, members of the ESB staff stayed with local families. According to *Shiel*, “A former Area Clerk recalled how on returning to his farm digs at night, when the family had gone early to bed, he would find his supper laid out on the kitchen table. His first duty, however, was to take a feeding bottle of milk to a piglet – the delicate runt of the litter – which was cosily ensconced in a canvass bag hammock beside the fire. Only when the bonham had been fed and tucked up for the night did he commence his own supper”.

Looking back from an Ireland that takes electricity and its benefits for granted, it is difficult to imagine the transformation it brought to rural areas, and to understand the initial ambivalence and opposition the potential change provoked in some people.

To many, electricity first appeared merely as an expensive, if admittedly a greatly superior, alternative to the traditional oil lamp or candle. Their forebears had successfully survived without it, and they could see no great advantage in hurrying to involve themselves in this new expense.

People were suspicious of the new technology and the possible motives of the innovators. Others were understandably worried about the risk of electrocution. The *Evening Herald* of 7th February 1953 carried a story from the Annes district of Scotshouse near Clones where an old man paid his customary weekly visit to his sister who had just been connected up. "He watched with fascination as she operated the new electric iron and boiled water in the new electric kettle, but stubbornly refused to drink the tea made from the latter, as he believed that the water was electrified. Willy-nilly, she had to make fresh tea from water boiled in a traditional kettle on the turf fire."

Many housewives felt that bright illumination mercilessly revealed dirt, dust and cobwebs and defects in furniture, putting undue pressure on them. And not all husbands could see the necessity of easing the traditional drudgery of farm housewives!

As part of a promotional initiative, free light bulbs for the kitchen were distributed – initially one hundred watt bulbs, but these proved too bright after the dimness of the old oil lamp, so forty or sixty watt bulbs were substituted.

Electrification of Grange

The first poles erected in Ireland under the Rural Electrification Scheme were in County Dublin, at Kilsallaghan, on 5th November 1946. In County Limerick, Patrickswell (near Limerick City as distinct from Patrickswell near Lough Gur) was the first rural area to be electrified, in 1947.

Grange came under the Bruff rural area sub-scheme. The ESB built a 38 kVA high voltage station at Patrickswell, near Lough Gur. From this station, three 10 kVA backbone lines fed out on routes to Caherline, Herbertstown and Bruff. The Bruff backbone line was routed from Patrickswell to Holycross and then leftwards on to the town of Bruff and onwards again to Kilmallock. A branch to Croom left the Bruff line at the Pike near the town of Bruff.

In order to bring electricity to the community of Grange, a single phase 10 kVA spur line was taken from a pole, numbered twenty-four, on the Bruff backbone line, which was located at the rear of the present home of Michael Weekes at Holycross. The spur line crossed the road at the present home of Seamus Ryan and his family, travelled north by the west side of Grange Stone Circle, passed over Grange Hill and on to Lower Grange and from a distribution point there to local customers, including The Hamlet Bar and Madden's Forge.

Work involved the erection of seventy poles, stringing 4,800 metres of high-voltage conductor (wire). Eighteen pole-mounted transformers provided for low voltage supply connections to the homes, farms and local businesses. Seventy-five

additional poles were erected from which 5,000 metres of low voltage (227 AC) wire was strung, to carry power from transformers to homes and other premises. Poles ranged from nine to eleven metres in length, of which in the order of a fifth was placed below ground level and buried. A wire from a pole to an external point on a premises is known as an 'aerial', while the connection from an external point to a meter position is known as a 'service', connected to a 35/60 amps main fuse.

All works were carried out through manual labour. All pole holes were dug by hand using pick and shovel, whether in bogland, upland or rocky surfaces. Where necessary, holes in the rocky land were made by blasting. The ESB had men trained and skilled in this specialised work. I believe that Tom O'Connor, blaster in the Grange area, was from the locality. Poles would be unloaded on the side of the roads by transporting lorries, which came from the pole-field (supply depot) at Corcanree on the Dock Road in Limerick. All poles were erected by hand – off the shoulders of several men. Sometimes the ESB hired a horse and swing from a local farmer to pull poles to the ground holes. All overhead wires were pulled by hand across fields and over roads and rivers, including to the point of connection at consumer premises in Grange.

A great debate took place in nearly every household as to where to locate sockets, lights and switches. The discussion went on in the pubs, at the creamery, at shops and after Mass on Sundays. In my own home, I remember a heated discussion between my mother and father over the positioning of sockets (two pins with earth). Mother wanted two sockets; she called them plugs, but father said one was good enough, and a light switch was a similar story. They arrived at a compromise; mother got one socket with the promise of another one later. Most homes were wired for one socket, two lights and a Sacred Heart light. When the power was switched on to homes, another issue arose where there were children – every child wanted to be the one to switch on the electric light!

The hospitality of the people of Grange was well known and appreciated by the ESB crews. Many a cup of tea was offered and had in nearly every house. Crews had many a tale to tell – one crew was working near a house, and it was very near the lunch break. Billy was working on top of the pole next to the house and he shouted down to John, "Don't put on the kettle, I see the woman of the house is laying four plates on the table". At the end of a day's work, men were tidying and putting tools away when the last man arrived in from pole work in a field. The charge hand asked him if he had buried the "dead man". A woman overheard the question and said she knew by the way they were carrying on that somebody would be killed. A "dead man" was a stay block used on an angle or end pole, buried in the ground.

Many of the workforce on Grange electrification came from the locality: O'Malley – foreman, Tommy O'Donovan, Beaver Irwin, Tom O'Connor – blaster, Pat O'Rourke, Phil Fitzgerald, Con Manning, Jimmy Madden and Egan Clancy.

Others included Tommy Hickey (supervisor), Pakie Keating, Patrick Ryan (grandfather of Ann and Danny Ryan), John Gleeson (brother of Pa Gleeson), John (Dogs) O'Brien, Dave McIneir (Bruff), Paddy Delaney (Boherard), Mickie Halpin, PJ O'Sullivan, Paddy Liston (West Limerick) and Tommie Cunningham.

Power was switched on for the Grange locality in February 1952, to much excitement and acclaim, bringing a modern way of living that instantly changed people's lives.

Conclusion

It is an irrefutable fact that people managed without electricity before it became widespread. It is also a fact that prior to the onset of modern technology and gadgetry over recent decades, people lived and managed without computers, mobile phones and other hand-held high-tech devices and much more.

Are we better off as humans to have the fruits of technological advances to assist us in living our lives? Few would deny or be prepared to forego the advantages and benefits bestowed upon us.

However, humans are creatures of habit, and when we adapt to and ultimately develop dependencies upon technologies such as electricity and mobile communications, we struggle to cope if deprived of them. There may, arguably, come a time in the future when humans may be forced to re-adjust to living in the world that is, once again, bereft of the technologies that are commonplace today. Our world faces many threats to its future status, most of these coming from within, including global warming, global political instability and varieties of fanaticism and terrorism, all of which have the potential to utterly change our technology driven and dependent world. Let us hope that such possibilities will not come to pass.

Regardless of what the future may bring, let us continue to enjoy the benefits of rural electrification and laud the men who made it a reality all those years ago. Let us, every now and then, perhaps while gazing at an electricity pole or a transformer, conjure up a vision of back-breaking work by hand mostly: preparing holes in difficult terrain, carrying and erecting huge and heavy poles, transformers, cables and other equipment. We owe those men of Grange and from beyond our heartfelt thanks!

References and Notes:

- (1) http://www.ouririshheritage.org/page_id_73.aspx – A changed Ireland by Dr Séamas Mac Philib – iCAN, Irish Community Archive Network; <http://www.chasinghubcaps.com/index/wp-content/uploads/2013/05/20-turn-on-the-lights.pdf> – based on Michael Shiel's book *The Quiet Revolution – the electrification of rural Ireland* (O'Brien Press; 1984)
- (2) Michael Shiel (1984) – *The Quiet Revolution*; p 13, 63, 125 and 128
- (3) *The ESB Archives*