# Rural Electrification

CHAPTER 4

When Charles Stewart Parnell was the guest-of-honour in 1891 at the switch-on of a small electricity generator in Carlow, he used the new light as the symbol of a reborn and free Ireland. His words foreshadowed what was perhaps the greatest social revolution in the history of Ireland, which commenced with the arrival of the Rural Electrification Scheme in the early 1950s. Very few innovations have had a more significant impact on Irish rural society. Its arrival heralded the introduction of an infrastructure which opened the way for the beginning of major social changes in the country. The cautious, conservative attitudes which in some cases had kept the smaller farmers only barely above the poverty line, soon began to change for the better. The effects of this revolution were clearly in evidence in Clontuskert. Farmers and their wives were released from the drudgery associated with many of the outdoor and household tasks which they had heretofore endured.

Anyone born after the arrival of the Rural Electrification Scheme would find it difficult to imagine the situation which faced the householder each evening with the coming-on of darkness. Particularly in winter, the scope of activities in the farmhouses and farmyards was to a very large extent dictated by the availability of



Oil lamp from the 1940s

day-light. Oil lamps were filled with paraffin, globes were cleaned, and wicks were trimmed, before the weak yellow glow spread from the walls or table-tops of the farmhouse kitchens. Those lucky enough to own a Tilly lamp fared a little better. To the accompaniment of a steady hissing sound, the brighter light emanating from these new light-sources reached further into the darker recesses of the

kitchens making it easier for the young scholars to pore over their sums and poems and spellings. Outside in the farmyards, animals were checked or milked or fed by the weak light of the oil lantern.

Prior to the advent of electricity, piped water was almost unheard of in rural areas. Perishable food could not be preserved for any length of time. Water was lifted by bucket from the shallow, open spring, or drawn by hand-pump from a covered well beneath. Fridges for maintaining the freshness of butter, milk and meat were unknown in rural areas. Meat was temporarily preserved in a wall safe of perforated tin placed on the shaded side of the house. The staple diet of most households was bacon from a home-killed pig, the meat of which was laid down in a wooden barrel between layers of salt. Household heating and cooking was provided by a turf fire in the open hearth or by the 'Stanley 9'



A farm lantern from the 1940s

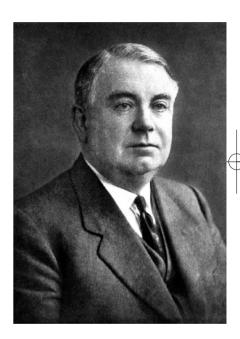
which had become commonplace in many homes. Televisions had not as yet made their appearance in Clontuskert and neither had electrically powered radios. It was a common sight to see men cycling with a 'wet' battery tied to the carrier on their way to Ballinasloe to have it charged.

This battery, in addition to a large 'dry' battery, was the only means of powering a radio. Unfortunately, the 'wet' battery had to be charged frequently, which meant that household radios were rarely turned on.

Up to the mid 1950s, and later in some areas, households across rural Ireland lagged a long way behind their town and city cousins in terms of the basic conveniences which electricity provided. The beginnings of an improvement in this situation commenced with a twenty-two year old engineer, Thomas

McLaughlin. Thomas was a native of Drogheda and graduated from U.C.D. with a B.Sc. degree in 1916 followed by an M.Sc. degree in 1918. He then took up a position in University College Galway, where he became a lecturer in Physics. In addition to his teaching duties, he also found time to qualify with a Degree in Engineering as well as a Doctorate in the same subject in 1923. During his time in Galway, he came up with the idea that the power of the Shannon could be harnessed to generate electricity. He went to Germany in 1923 to work for the Siemens Schuckert company in Berlin. His abiding dream was to build an electricity generating system which would supply power to every corner of the newly formed Irish Free State. His firm became interested in his idea and together they presented the concept to

the Free State Government. Their plan was enthusiastically adopted by the Minister for Industry and Commerce, Patrick McGilligan, who overcame the objections of businessmen, cautious politicians, sections of a hostile press and a powerful lobby group which pressed for the installation of the proposed generating station on the Liffey and not on the preferred site at Ardnacrusha



Thomas McLaughlin

on the lower Shannon. Dream became reality when the Electricity Supply Board, Ireland's first state- sponsored body, was established on the 11th of August, 1927. The system was officially opened two years later on July 22nd, 1929 and the first current flowed through the power lines three months later.

From its inception, the main aim of the Electricity Supply Board, was to provide a supply to the whole country, rural as well as urban. Seán Lemass, a visionary Minister for Industry and Commerce, worked tirelessly to ensure that this aim was brought to fruition. In an address to the Senate on the 7th of March 1945, he highlighted this aim in a light-hearted fashion:

I hope to see the day that when a girl gets a proposal from a farmer she will enquire not so much about the number of cows but rather concerning the electrical appliances she will require before she gives her consent, including not merely electric light but a water heater, an electric clothes boiler, a vacuum cleaner and even a refrigerator.

Before an electricity supply could be provided throughout rural Ireland, a staggering amount of preparatory work was undertaken. One and three quarter million people had to be provided with a supply. Thirty-five thousand of these lived in rural villages while the remaining ninety-eight per cent were living in the countryside. The strategic mapping of power lines was undertaken, a very large staff was trained, transport was organised and materials were bought. Some idea of the magnitude of the undertaking can be ascertained from the quantities of the materials ordered. Over a million timber poles, which were to be erected in forty different localities, were bought from Sweden and Finland; up to a hundred thousand transformers were either imported or manufactured at a

new plant in Waterford; more than seventy-five thousand miles of cable was imported from Canada, or was supplied by the newlyformed Aberdare Electric Company Ltd. in Dublin.

In addition to the provision of materials, potential customers from all over rural Ireland were canvassed. Every householder in Clontuskert was interviewed and those interested in obtaining an electricity supply signed a provisional application form. This was followed by a visit from the local organiser who measured the floor area of the dwelling-house and the outbuildings, so that the amount of the fixed charge could be calculated. At this stage, the official application form had to be signed. Some people backed out at this juncture.

While these preliminary negotiations were taking place, the path-way of the power lines was pegged out and way-leave was obtained, so that construction crews could enter the properties. A number of local people were employed to assist in tree felling. Deep holes were excavated into which the electric poles would be



Raising an E.S.B pole in the 1950s

lowered and erected in place. The wiring of houses then commenced, much of the work being carried out by local handymen.

Provision of electricity was planned on an area basis and the country was divided into seven hundred and ninety-two areas. Priority of installation was given to those areas where the expected revenue was highest in relation to the capital cost. Consequently, very remote rural areas with a small number of subscribers were among the last to be connected. Luckily, much of Clontuskert was not numbered among the latter, and the erection of the power-lines which would carry electricity to the parish, was begun in 1951.

On December 22nd 1952 the situation regarding the supply of electricity to the parish of Clontuskert was summed up by the E.S.B. as follows:

Total houses on map	170
Economic acceptances	68
Un-economic acceptances	21
Refusal	66
Doubtful	8
Houses vacant and not seen	7
Total Capital Cost	£8190
Total uneconomic cost	£3939

The diagram of the electricity supply proposed for the parish, resembled the outline of a great tree with its branches and sub-branches growing out from the trunk. The trunk or backbone of the system was a 10,000-Volt, three-phase power-line which commenced in Mackney, just across the road and a little further up the hill from the entrance to Árdscoil Mhuire. From this central line, a series of subsidiary lines branched out in various directions.

From there it went to Lawrencetown on its way to Eyrecourt, passing through the townlands of Mackney, Moher, Graigueawoneen, Glenloughaun, Gortnahorna, Chapelpark, Lakefield, Stream, Ganaveen and Tirrooaun.

Single-phase branch lines were taken off this main supply line at Moher, Graigueawoneen, Glenloughaun, Ballinure Bridge, Gortnahorna, Lakefield, Ballymanagh and Ganaveen. Houses adjacent to this line were connected first. Probably the biggest branch line was the one which went from near Ballinure Bridge to John Joe Barry's house in Tristaun. From there it branched right towards Aughrim and left to the Sheepwalk area. Half way between these two points, it took a further branch to the right towards Ardranny and Lisheenavannogue.

However, many areas of the parish were not connected until the Post Development Programme in the 1960s, a fact which led to considerable dissatisfaction among the disappointed householders. When the Government subsidy was withdrawn in 1955, the feelings of frustration had already begun to intensify. Meetings were held to see if the situation could be remedied and considerable pressure was exerted by the Clontuskert branch of Muintir na Tíre. After a three-year delay, the subsidy was restored and expectations of a speedy resumption of the provision of supply to the remaining households were raised.

Even as the installation work commenced, the topic of conversation around the firesides continued to dwell on the advisability or inadvisability of signing on for the connection and on the dangers inherent in having electricity in the house at all.

As soon as everything was ready, the night of the big 'Switch-on' was a major occasion in many rural parishes around the country. Celebrations were more muted in Clontuskert. Despite this, the first switch to be clicked in each household introduced an

almost magical feeling in the kitchens across the parish. Delighted housewives joked about the amount of extra sweeping and dusting that would be inflicted on them by the new, all-revealing light. Looking around the kitchens at the glowing bulb in the ceiling and the single plug on the wall, they began to dream of the day when a fridge or a washing machine or other almost unimaginable luxuries might be installed.

The story of Clontuskert and electricity supplies did not end there. In 1962 a new three-phase 38,000-volt power line bisected the parish. This line came from the Ballinasloe Transformer Station to a new station at Ballycrissane, crossing the road near Goodes' in Moher and at Joe Hayes' meat plant in Kellysgrove. This line however did not transmit any power to the parish. Its function was to carry power direct from Ballinasloe to Portumna.

The largest piece of electrical infrastructure in Clontuskert was built in 1994, when a high-voltage transformer station was constructed at Somerset. The 110,000-volt power line from Shannonbridge passes through this station on its way to Galway. Three lines supplying power to Ballinasloe, Portumna and Loughrea radiate from this hub after the voltage has been reduced to 38,000 volts. This line does not supply power directly to any installation in the parish.

There is something of an irony in the siting of the Somerset transformer station. Almost immediately across the road from this installation lies the only remaining fulacht fiadh in Clontuskert parish, dating from between 2,200 and 500 BC, during the Bronze Age. Only a few hundred metres away, is the field where the Somerset Hoard was found. This Iron Age trove probably dates from before the beginning of the Christian era. Within the bounds of a few acres, a time-span of over 4,000 years is represented.