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Mapping the Local Response to the National Strategy
How the British Electrical Grid was Built and Developed

It is well known that Britain built the first electricity grid. The early days of the British electricity industry have been written about by Thomas Hughes, Leslie Hannah and others following its progress from the early 1880s through World War One into to the first quarter of the twentieth century. Many Electrical Engineers working in Britain were leaders in their field, Ferranti, Merz, Maclellan and Swann to name just a few, but the country was falling behind comparable nations such as Germany and America with regards to electrification, which became a political issue towards the end of the First World War. A number of parliamentary commissioned reports published over this time resulted in the scheme to build a National Grid. The architecturally designed pylons and high voltage lines, allowing bulk transmission of electricity, were built between 1926 and 1933. The infrastructure was intended to reduce the number of generating stations providing diverse electrical power from 438 to just 50, and these selected stations would work with the grid to provide a standardised supply of electrical power. Whilst no companies would be forced to close it was expected that many would become uneconomic as the new system took over. There is very little work on the impacts of this national policy, particularly to determine how it affected individual companies, localities and regions.

This paper follows the development of the electricity industry in the South West of England, where generation and distribution began in the early 1880's. Using mapping techniques it combines company histories and census data to investigate the growth of companies in the urban and rural areas of Cornwall, Devon, Somerset and Dorset. The applications, made by the individual companies, to national bodies for licenses to supply electricity are used to show how the companies expanded their supply territories. The location, number, and occupations of consumers will be explored to determine who electricity became available to and when it could be accessed. The paper will also establish and analyse regional and local responses by the electrical supply companies to the huge

changes in national electricity policies over this time period to discover if the national policy created its intended vision and what alternative paths might have been taken.

By understanding the responses of the companies to national policies and to their consumers it becomes possible to consider the environmental impacts of this vast infrastructure on both the physical environment, and the behaviour of the people it reached, which is the overall aim of my work. This case study in conjunction with a more industrial case study, and looking at self-generation of grand estates will help to build a more rounded picture of the environmental legacy of the electricity industry, and particularly the contribution of the grid, during this period.