



Obtaining a New or Reinforced Electricity Supply

INTRODUCTION

When electricity services to farms are installed or altered (e.g. supply capacity is increased or a single-phase supply is converted to three phase), there are usually major costs incurred in reinforcing or re-engineering the supply network. The customer in question is usually asked to pay for all or part of this work. Since privatisation of the electricity network and the business separation of electricity distribution and supply, costs are now much higher than they used to be.

If you are considering installing extra electrical equipment on your farm you need to investigate the implications with your local Distribution Network Operator (DNO).

This guide will help to explain the system of obtaining supply reinforcements and hopefully ease the process.

APPLYING FOR AN INCREASED ELECTRICITY SUPPLY

We recommend you take the following steps when considering an application for an electricity connection:

1. Make a list of the new equipment you propose to install, e.g. two 10kW pumps, or an extra eight 630mm fans, 400W each. Consider that, in sizing the connection, the electricity company is interested in the sustained electrical demand over any single ½ hour period. This must take into account your existing load plus the new load. This is seldom obtained by simply adding together the ratings of all the equipment, as there is always some 'diversity' in use. For instance, in a house, an electric shower, a kettle and an oven would not be on full, together for any one complete ½ hour period. The actual ½ hour demand would be considerably less than the sum of the three ratings. Judging this, especially for large installation, can be tricky so you are advised to consult someone who has experience in this practice.
2. You also need to know the largest motor and welder size and the 'starting' method it uses. This is because these types of equipment demand large amounts of current when starting or striking and as a result, cause the voltage to 'flicker'. It's always best to limit equipment size if possible (i.e. use two small motors instead of one large one) or use low disturbance starting methods like 'soft-start'.
3. Contact your DNO for an 'Application for New Supply' form. Note that your DNO may be a company with a name not familiar to you – Eg Western Power Distribution, Aquilla, Energy Services. These companies are not involved in energy sales so do not have the high profile of companies like npower or e-on however they are responsible for the electricity network and connections. Your electricity supplier may be able to help you in contacting your DNO.
4. Most DNO's will give you an initial estimate for the cost of work required. Don't be put off by the figure quoted. For some reason early estimates are often wildly high.
5. For a full quotation, you may be asked to pay a 'design fee' up-front, and if you should subsequently decide not to proceed in having the scheme installed, you will lose this money.
6. Remember that clear proposals will lead to speedier answers. Try not to be vague about what you want and provide detail plans of where you want the supply to be connected and



Obtaining a New or Reinforced Electricity Supply

any routes you think are preferable.

- 7. If you have equipment available to carryout excavation and reinstatement you may be able to save money by opting to do this work yourself.
- 8. Remember that supply reinforcements involving alteration or extensions of the high voltage network can take six to twelve months to complete, so it is essential to inform your DNO as soon as you start to plan any new development. Don't wait till everything else is built before applying

The following table shows the breakdown of times required for the stages in a typical installation

Installation Stage	Timeframe
Technical proposals & quotation	1 month
Wayleaves and Easements	2 months
Local Planning Authority	6 weeks
Department of Energy	2 weeks
Work programming	1 to 6 months

- 9. Consider future possible expansion plans at the same time as your present proposal. Although it's not wise to over-size your requirements, its worth taking to account your future plans so you don't have to do the job twice.
- 10. You may be asked to complete a site hazard form which asks questions about possible ground contamination, working hazards and other contractors working on site.
- 11. Many DNO's ask for their money up-front well before they undertake the work. Sometimes, especially when wayleave negotiations are protracted you can negotiate to pay an initial deposit with the balance due before to construction work starts
- 12. If you accept a quotation from a DNO for new work you will be asked to nominate an 'Electricity Supplier' who will be responsible for organising your meter and your electricity contract. If you fail to do this, you will not be able to be connected when the network installation is finished.

COMPETITION

A frequently asked question is; "Could any party other than my DNO undertake the work at a lower cost?" Since 1995 some network installations are open to competition and, in theory, can be carried out by a suitably qualified and registered contractor. Practically however, it is often difficult to get someone to undertake this work especially for small installations as the work is specialised and the administration is lengthy.

If asked, a DNO will breakdown your quote into 'contestable' and 'non contestable' components. You can ask for competitive quotes only for the 'contestable' work.

fec energy guide



Obtaining a New or Reinforced Electricity Supply

DISPUTES

If you receive a quotation you are not happy with it, you should firstly query it with the DNO. You can take this further if necessary with your local energywatch office. Finally, it is possible to take a dispute to 'determination' which is judged by OFGEM and produces a binding result. This process can be involved and lengthy.

NFU ENERGY SERVICE

A service is offered through the NFU which provides the necessary negotiating and planning expertise for utility connection issues. You should initially contact CALLFIRST if you are interested in this service

USEFUL CONTACTS

The electricity company contacts are too numerous to list. Their details can be found by searching on the web – they are also listed on the ENA website shown below:

<p>Energy Networks Association (ENA)</p> <p>18 Stanhope Place, Marble Arch, London, W2 2HH Tel: 020 7706 5100</p> <p>http://www.energynetworks.org</p>	<p>Ofgem</p> <p>9 Millbank, London, SW1P 3GE Tel: 020 7901 7000 Fax: 020 7901 706</p> <p>http://www.ofgem.gov.uk</p>
<p>Energywatch</p> <p>Helpline: 08459 06 07 08 http://www.energywatch.org.uk</p>	

fec energy guide