

NIE Guidelines for Ground Source Heat Pumps

NIE is keen to encourage the installation of renewable energy technologies. Heat pumps are becoming increasingly popular and NIE have therefore developed guidelines in relation to ensuring that the electricity supply is adequate and customers are on the most appropriate tariff.

Your electricity supply

Ground source heat pumps (GSHPs), particularly when they start up, use a significant amount of electricity. If not managed carefully, this can affect the quality of the electricity supply in the area so to ensure that the quality of the supply is correctly managed, NIE has two requirements:

- All GSHPs are fitted with a 'soft start' control mechanism – your installer should arrange this for you although most good quality heat pumps have this fitted as standard.
- There is a possibility that the property with the heat pump may need to be supplied from a 25kVA transformer or greater but this will be decided on a case-by-case basis by NIE. If an upgrade is required, the customers wishing to install a heat pump will be charged for the work.

The NIE application process is the same for new and existing properties:

- You need to contact NIE as soon as possible and request a new electricity supply or an upgrade to the existing supply indicating that there will be a ground source heat pump (GSHP) installed at the property. You need to complete an Application for Electricity Supply/Alteration form as well as a GSHP application form. To request the appropriate application forms please call 08457 643 643 or you can download the forms from www.nie.co.uk under 'getting a new supply'. For guidance on how to complete the application forms accurately please see the sample forms below. Complete the application forms and post them to your nearest NIE office.
- Your completed application forms will then be processed and an NIE planner will contact you to discuss your requirements or to request more information (if necessary) approximately 1-2 weeks after your completed forms were received. This information will enable the NIE planner to design a suitable method of supply.
- Upon completion of the design, you will receive formal Terms and Conditions from NIE for the new supply detailing any charges which may be applicable.
- If you are satisfied with the Terms and Conditions offered by NIE, you need to send back in to NIE the Acceptance of Terms form which will have been posted to you, along with any necessary payment.
- There may be legalities surrounding your application and NIE may need to contact other organisations about your application, for example, to get wayleaves permission, Planning Permission or agreement from other utility companies (in some instances this may take up to 6 months but depends on the Planning Service). When all legalities are complete, NIE can proceed to carry out the necessary site work.
- It is the responsibility of your own electrical contractor to submit an NIE Connection card to indicate to NIE that the installation has been completed to the necessary standard required for connection. Your electrical contractor should also note on the NIE Connection Card the appropriate tariff (please see the tariff options below).
- NIE will then make the necessary arrangements to have the correct metering installed for you.

Tariff Options

NIE is currently exploring tariff options for GSHP customers. At the moment, it is likely that GSHPs would operate most economically on either:

- Economy 7 – an off peak tariff which provides lower rate electricity during the night.
- Keypad powershift – a tariff which is available with a keypad meter which has lower rates during the night and most of the day but is MORE expensive between 4-7pm on weekdays.

*Prospective or existing GSHP customers should discuss the most appropriate tariff options with their installer, however it is the customer's responsibility to choose the most appropriate tariff and make the necessary arrangements with NIE.