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What are electricity Triads?

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The Triads are the three half-hour settlement periods of highest demand on the GB electricity transmission system between November and February (inclusive) each year, separated by at least ten clear days. National Grid uses the Triads to determine TNUoS locational demand charges for customers with half hourly meters.

Who pays?

The Triads are used to calculate the locational element of TNUoS charges for those who are half hourly (HH) metered. This tends to be industrial and commercial customers. If they don't consume electricity in the three Triad periods, they don't pay HH and EE locational TNUoS charges for the entire financial year, but they would still pay the TDR (transmission demand residual) site daily charge.

How are charges calculated for those who aren't half hourly metered?

For suppliers with non-half hourly (NHH) tariff customers such as domestic supply (including those with smart meters), your TNUoS charges are calculated by your annual consumption between 16:00 and 19:00. They are not calculated using Triads and do not pay HH or EE tariffs.

Why are Triad periods separated by 10 clear days?

This is to avoid all three Triads potentially falling in consecutive hours on the same day, for example during a particularly cold spell of weather.

What are "10 Clear Days" and what is an example of 10 clear day separation?

As per CUSC section 11.3, "10 Clear Days" is defined as 10 complete periods of 24 hours from 00:00hrs to 24:00hrs. For example, if the first peak falls on any half hourly settlement period on 15th of December, the second peak can only fall on or before 4th December, or on or after 26th December. Similarly, the third peak must have 10 clear day gap from both peak 1 & 2.

What might signal a Triad?

National Grid does not forecast the Triads in advance - they are only known post-February after the winter period has concluded. This is designed to encourage demand customers to avoid taking energy off the system during peak times, if possible, thereby reducing the need to build expensive infrastructure that all customers would need to pay for. Some suppliers and consultancies provide a Triad forecasting service to notify their customers when they believe a Triad is likely to occur.

How are Triads calculated?

The Triads for each financial year are calculated at the end of March using system demand data for the half hourly settlement periods between November and February (inclusive).

Locational demand charges for the year are based on the HH and EE demand tariff which ranges depending on which geographical demand zone you are located in. Your tariff is multiplied by your average demand in kW during the three Triad half-hours. In addition, you pay a TDR site daily charge.

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How do I calculate my average consumption over the Triads?

You will need to convert your metered consumption in kWh to an average Triad kW figure. Here's how to do it:

Firstly, convert your consumption in kWh to kW:

	Triad 1	Triad 2	Triad 3
Consumption (kWh)	2000	3000	5000
Time (hours)	0.5	0.5	0.5
kW = kWh/hours	4000	6000	10000

Next, take the average of your kW taken over the Triads:

$$= \frac{\text{Triad 1} + \text{Triad 2} + \text{Triad 3 (kW)}}{3 \text{ Triads}} = \frac{4000 + 6000 + 10000}{3} = 6666.66 \text{ kW}$$

In this example, the average consumption over the Triads is 6666.66kW. This is the volume you will be billed for.

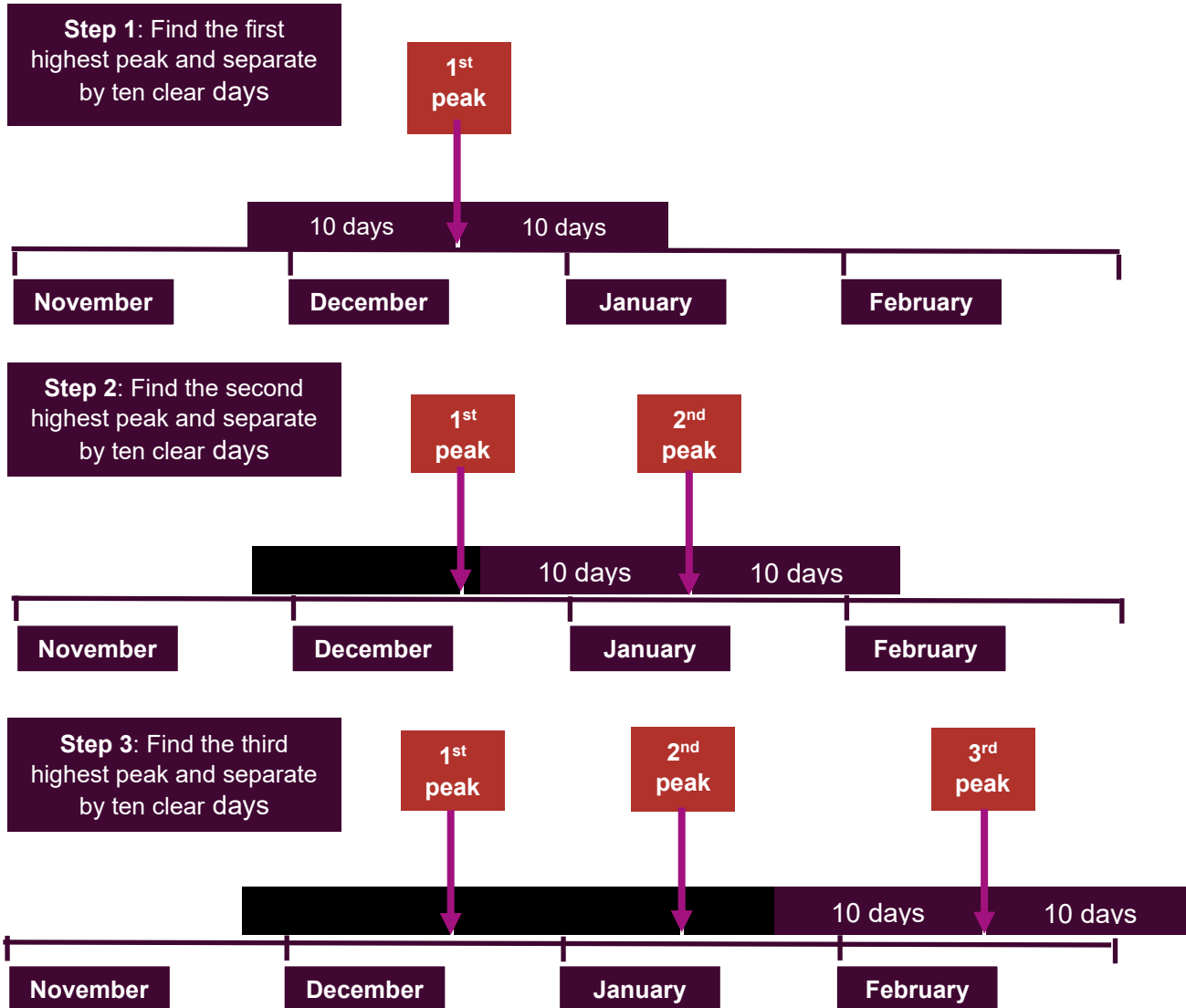
Where can I find historical Triads data?

The historic data can be found here.

[Transmission Network Use of System \(TNUoS\) Charges | National Energy System Operator](#)

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The diagram below shows the process for determining Triads



We hope you found this guidance document useful. Any questions? Contact TNUoS.queries@nationalenergyso.com

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Disclaimer

In the event of any inconsistencies between this guidance note and the CUSC, the NGC Use of System Charging Methodology or the BSC, then the CUSC, the NGC Use of System Charging Methodology or the BSC will take precedence.

The CUSC all Code subsidiary documentation can be downloaded from the National Grid Website. The Statement of the Use of System Charging Methodology and the CUSC can be downloaded from the website.

For more information, please contact the TNUoS team at TNUoS.Queries@nationalenergyso.com.