Frequency Response in the United Kingdom
Get Paid for Your Flexibility

What is Frequency Response?

System frequency is a measure of the balance between energy generated and consumed—a constantly shifting number that must be managed and controlled at all times. National Grid is required to maintain system frequency within one per cent of 50Hz, so it must ensure that enough generation or demand is automatically available to balance any unexpected changes in system frequency.

To meet its requirement, National Grid needs energy users to provide frequency response services, where they're expected to act fast—within two seconds—and increase, decrease, or shift demand, or turn on back-up generation to help stabilise the grid.

Who can participate?

Energy consumers with stable and predictable loads that can automatically respond to major changes in system frequency for up to 30 minutes can participate in the scheme. These dispatches, which can amount to 6–10 per year for constantly available participants, are most likely to occur between 5 a.m. and midnight. Frequency response participants can also participate in the Transitional Arrangements, Capacity Market, and other balancing services, as well as demand management activities (e.g., TRIADs).

What are the details?

Frequency Response Services	
Availability Period	Annual (rolling enrolment)
Availability Days	7 days per week
Availability Hours	24 hours per day
Dispatch Duration	Up to 30 minutes

How do I participate?

EnerNOC makes participation easy. We take care of the complex details so you can stay focused on running your business.

- We work with your staff to create a bespoke energy management plan (EMP) that yields maximum value with minimal impact on your operations.
- We conduct a simulated dispatch prior to enrolment to ensure that you are comfortable with your EMP.
- We handle all data processing and settlement with National Grid to ensure fast compensation.

How much revenue can I earn?

Earnings from frequency response depend on how much flexibility you can commit to provide and the number of hours per year that you commit to participate. Following an assessment of your operations, we will provide an estimate of your earning potential based on your expected level of participation.

How do I get paid?

Frequency response participants will receive quarterly payments from EnerNOC for their participation.

Does it cost anything to participate?

EnerNOC bears all direct costs for your participation in frequency response.

What type of equipment is suitable for participation?

Any electricity demand curtailment or small-scale generation assets that can respond within 2 seconds for up to 30 minutes are ideal. EnerNOC has extensive experience in identifying frequency response opportunities in a wide range of industries and equipment including:

- Cold storage equipment
- Pieces of machinery
- Uninterruptible power supply (UPS) systems

What can I expect during a dispatch?

EnerNOC will install a frequency sensing device at each customer site. When the device senses a drop in frequency, it will trigger connected devices to reduce demand or increase generation as required. National Grid will notify EnerNOC when frequency response resources are no longer needed and EnerNOC will notify its customers by phone, SMS, or email that they can restore their operations to normal. Throughout the dispatch, EnerNOC support personnel help ensure that you achieve the highest level of performance and resulting payments.

What happens if I cannot meet my commitment?

EnerNOC shields customers from all penalties associated with underperformance. While failure to meet your commitment may result in reduced earnings, you will never be required to make any out-of-pocket payments.

What are the benefits?

- Earn payments for participating
- Reduce energy costs
- Protect your operations and your community from potential blackouts

Can I view my performance?

Users of EnerNOC's energy intelligence software (EIS) can view their frequency response performance in real-time by logging into our web-based application.

EnerNOC's EIS helps organisations reduce operational costs, enhance visibility, and improve compliance and reporting—without adding complexity. Plant managers and financial decisions makers alike use EIS to make decisions that give their business a competitive advantage. To learn more, visit www.enernoc.com/uk.