

BAT DETERRENT SYSTEMS

THE VALUE OF SAVING BATS

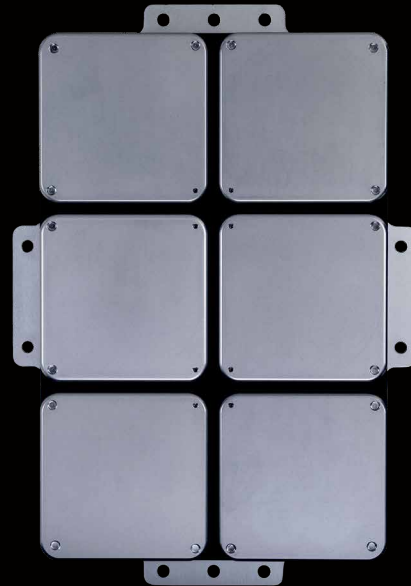
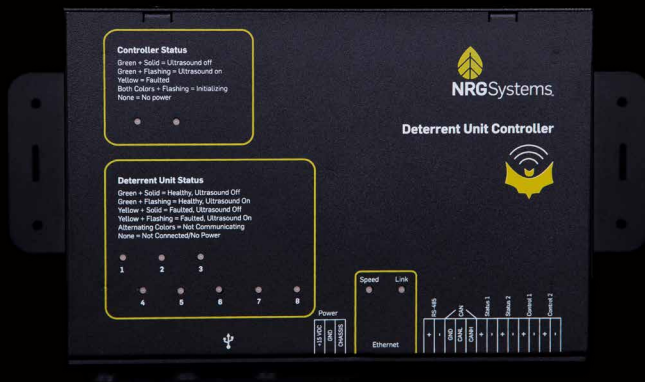


Better Energy by Every Measure™



NRGSystems®

NRG Systems developed its pioneering bat deterrent technology to significantly reduce bat take while minimizing the need to curtail. By keeping turbines in operation more of the time, we are protecting the financial viability of wind projects and maximizing ROI.



NRG Systems Bat Deterrent System

REDUCE CURTAILMENT, MAXIMIZE OUTPUT

Some of the most effective bat mitigation methods involve curtailing or stopping wind turbines – a practice that reduces energy output. NRG Systems understands that this is not an ideal option for wind plant operators or for winning the fight against climate change. NRG's Bat Deterrent Systems have been shown to significantly reduce bat take while minimizing the need to curtail, meaning operators can produce more renewable energy more of the time while keeping bats out of harm's way.

DATA-EMPOWERED OPERABILITY

To ensure that deployed Bat Deterrent Systems are operating as expected, NRG Systems remotely monitors the system health of all fielded units. Our systems come with out of the box global communication capabilities that leverage satellite connectivity to provide reliable, uninterrupted data access. This advanced feature enables operability peace of mind without the complexities of integrating with a wind plant's SCADA network.

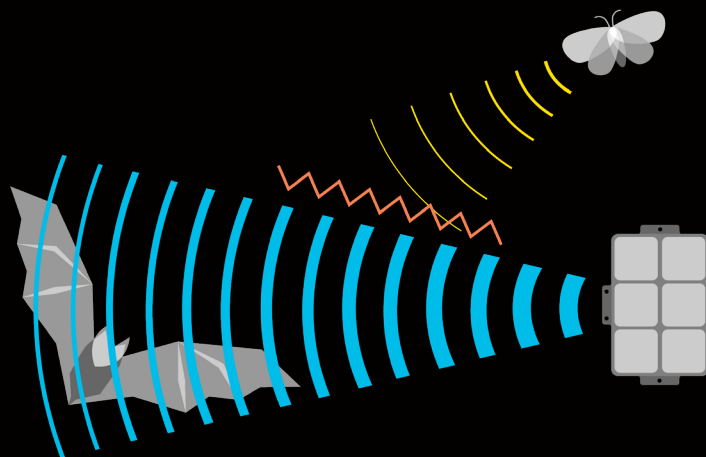
UNPARALLELED SUPPORT, EVERY STEP OF THE WAY

NRG Bat Deterrent Systems are designed to be turnkey, with unparalleled support from procurement through operation. Our team will work with all necessary stakeholders to determine the most effective system configuration for a project and support installation and commissioning, no matter where your project is located. Once units are deployed, our in-house data analysis and system monitoring ensures worry-free operation, minimizing downtime and maintaining optimal energy production.

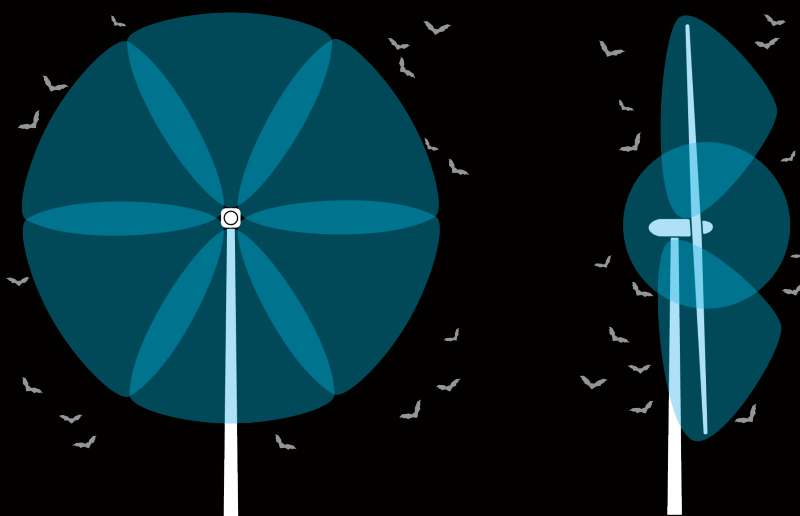
HOW IT WORKS:

The Bat Deterrent Systems emit an ultrasonic acoustic field in the same range as bats' natural calling frequencies.

When a bat enters the airspace where the deterrent units are operating, the ultrasound from the deterrent units (blue) will be louder than the echo return the bat is listening for (yellow). This effectively "jams" the bat's ability to hear its own return. If the bat cannot hear the echoes, it is unable to successfully forage and orient itself, so it chooses airspace without the ultrasonic noise and away from the turbine's rotor swept zone.

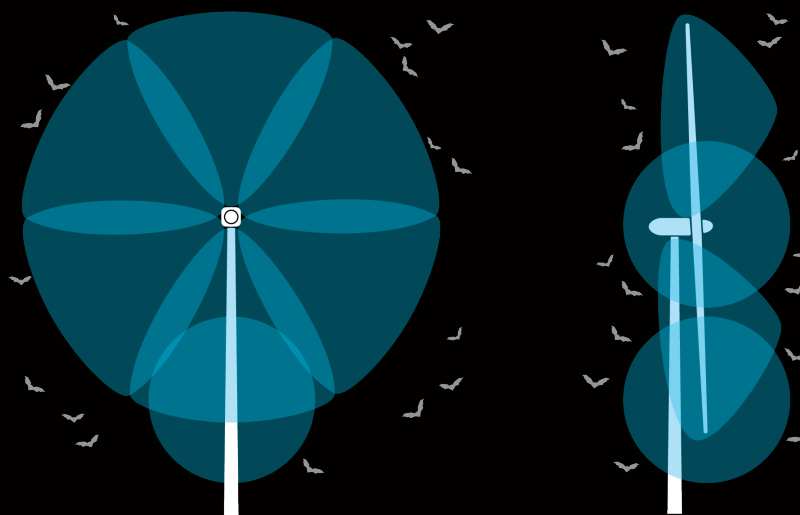


NACELLE-MOUNTED UNITS



**For illustration purposes only.*

NACELLE PLUS TOWER-MOUNTED UNITS



Variations in how ultrasound is absorbed by the atmosphere cause high frequencies to have a shorter effective range than lower frequencies.

WHO WE ARE

NRG Systems is the global leader in wind and solar resource measurement and intelligence. Our hardware, software, and related services empower many of the world's largest developers to make informed decisions and improve efficiency at all stages of project development. With over 40 years of experience, NRG's heritage of innovation and deep understanding of data collection, management, and analysis drives the advancement of their signature turnkey solutions. A subsidiary of ESCO Technologies Inc. (NYSE: ESE), NRG Systems has offices in North America, Europe, and Asia and has shipped products to over 170 countries.

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For more information:

NRG Sales
+1 802.482.2255
bats@nrgsystems.com
nrgsystems.com
nrgsavesbats.com
ISO 9001:2015 Certified
ISO 14001:2015 Self-Certified