



Natural Generation

Energy for the future

WINTER 2019



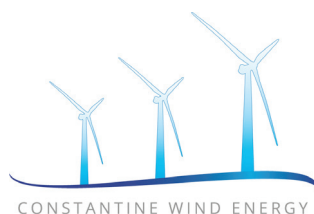
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01872 571700
www.naturalgen.co.uk

Thinking of selling your turbine?

Constantine Wind Energy, Natural Generation's parent company are continuously expanding their Wind Turbine investments.

Current investments include: Northern Power Systems, Endurance, EWT, Vestas and Micon turbines. We welcome the opportunity to discuss releasing any capital you have invested in your wind turbine.

Call us today
01872 571700



What a difference a decade makes



Ivor Thomson,
Managing Director

Smart Energy Islands
project, Isles of Scilly

For over 10 years Natural Generation has been helping its customers cut their fuel bills and reduce their carbon footprints. That's still the sole focus of what we do.

Much has changed in the UK energy market in that time, and we have changed with it. Underpinned by the financial clout of the 130 year old Constantine Group, owners of CWE who in turn own a large fleet of turbines themselves and with over 450 wind turbines and 21MW of PV under our care, we're better

placed than ever to understand and support our customers.

Natural Generation is 100% focused on being the UK's leading Operations and Maintenance specialist in the renewable energy sector, building our business through top quality service and customer care.

I am always happy to hear what we are doing right and, of course, what we are doing wrong so please feel free to pick the phone up. I'll always make time to talk to customers.

I look forward to hearing from you.

Best wishes,

Ivor Thomson
Managing Director

New Customer Support Team for Natural Generation customers

We are always trying to improve how we do things. So we have taken a fresh look at how we can improve our customer service structure.

From now on all our wind customers will be able to speak direct to a dedicated customer service team member for their region, through our automated telephone system.

Phil Taylor, wind turbine customer team member for Scotland and the North, says "As the company grew, we identified the need to refine the way our customers can contact us. All they want is simple communications and a quick response to their problem. This way, customers know who they will be dealing with and the customer service team get to know the customer better, and problems are solved quicker. It's working really well."



From left to right; Andy Neild (Wales and Midlands), Fran Thomas (South), Phil Taylor (Scotland and the North)

So whether you're a new or existing customer, why not call us for a chat on 01872 571700?

Your account manager will be happy to hear from you.

24/7/365 Remote Monitoring as standard

Kris Wall leads our in-house team of wind turbine and solar monitoring specialists.

Sitting in front of monitors displaying the vital signs of over 450 wind turbines and 21MW of solar PV across the UK, they are responsible for providing Natural Generation's remote monitoring service, the only one of its kind in the UK's small scale wind power industry.

Using monitoring software helps us to diagnose problems remotely, avoid shutdowns and get technicians out to site quickly.

"This is no empty claim," says Kris "We are not talking about someone with a smartphone near the bed in case a text alert comes in. We have trained operators actively monitoring around the clock, 24 hours a day, every day of the year.



It's not just a reactive service. The goal is to spot any warning signs early enough to avoid major problems later on, and to keep your wind turbines and your solar PV running to their full potential. "In some cases, even a minor glitch with a temperature sensor can default to an emergency stop with a turbine, which is not good for the machine or the owner's income. We can spot a fault of this kind whenever it occurs, even in the middle of the night, and keep the machine running until it can be visited."

Condition Monitoring now available

Natural Generation is now offering Condition Monitoring on our E-Series turbines provided by industry leaders Turner Icen. This service uses additional sensors to "listen" to bearings, gearboxes, bedplate and shaft. "Endurance E3120 customers who opt for the Platinum Maintenance Contract get this as part of the package, otherwise it's an optional extra. It helps towards the diagnosis of problems early on and can potentially reduce downtime, which is what it is all about," says Kris.

If you would like to talk about maintenance packages, please give us a call on 01872 571700.

A day in the life of... Chris Dunford, Senior Wind Technician



A time served technician, Natural Generation's very own Spin Doctor is normally to be found out in the workshop at our service base in Cornwall, repairing and upgrading the turbines that come in from all over the UK and islands.

Mostly it's the Endurance turbines that come into our workshop. We have made sure we can offer customers

a full range of solutions for these machines and it's Chris and his colleagues that perform the work.

"The classic problems, particularly on the E-Series turbine, are cracks in the bedplate, failure of the main shaft, gearbox grumbles and blade spring tube failures. We've built up a huge stock of spares so we don't need to wait for parts to arrive" says Chris.

"Downtime is the last thing customers want, and we can go a long way towards making it a thing of the past. We always try to minimise disruption for our customers".



If you'd like to know more about servicing and upgrade options
for Endurance, NPS, Vestas and other turbine makes,
please call us on 01872 571700

Getting the Natural Generation stock room shipshape and Bristol fashion

Steve Bowen's naval background made him the ideal candidate when we advertised for a storesperson. He's now been with us for 8 months and in that time he has been part of a team who has helped revolutionise our parts and stock system.

One of MD Ivor Thomson's long term projects has been to build up a spares inventory, minimising the time it takes to fix a customer's wind or solar PV system. Natural Generation now have over £1 million of its own parts in stock, on the shelf across Cornwall, Bristol and Scotland.



"The biggest hold up in fixing our customers' systems, apart from the weather, was usually waiting for spare parts" says Ivor "and it often meant two trips to a site instead of one. The best thing we could do was to have all the right parts in stock."

Now, when our technicians go to a call out they can take all the parts they are likely to need with them. Steve is part of the purchasing team at Natural Generation's head office who manage stock levels and negotiate the best deals on parts, savings that can be passed on to you, the customer.

We also hold parts for the larger workshop jobs, such as bedframe and shaft replacements and blade upgrades.

"Remote diagnosis, better procurement and smarter stock management are just some of the ways in which we have improved the cost to the customer of a turbine failure over the past couple of years" says Ivor. "Technicians arriving with all the parts they need to finish the job in one go also means they spend less time on the road and more time fixing turbines. It's better for us and better for the customer."

If you want to talk about your wind turbine, give us a call on 01872 571700

A tale of two turbines: similar faults, different solutions

Turbine 1 – The difference between being in a fix and finding one

When a 7 year old Endurance E3120 turbine suffered a major failure, a Yorkshire Dales farmer was left with an asset that was no longer producing revenue and which needed considerable work before it would do so again.

With no maintenance contract in place, he turned to us for advice, as suggested by a friend.

Natural Generation arranged a site visit which diagnosed two cracks in the bedplate, a common fault with these machines, and a few other issues. With the manufacturer long since out of business, Natural Generation were in a unique position to be able to advise the customer how to proceed. The turbine was installed while the tariff was still quite high, and had already paid for itself so the economics favoured a fix as quickly as possible.

We recommended a handful of other upgrades while the turbine was being worked on; we arranged for the unit to be craned off the following week and shipped to the workshop at head office. Less than 2 weeks later the machine was back where it should be, up and running and earning money.

Not only could we perform the work the turbine needed to get it up and running swiftly, with all parts held in stock we could then offer the customer complete peace of mind through our top of the range new Platinum support package which includes almost all labour and parts.

For the first time in years the farmer didn't need to worry about the turbine. With a fully upgraded machine, and the maintenance contract in place, he could look forward to many years of trouble free running.

Turbine 2 – When it pays to wash your hands

Another customer had a similar set of faults occur in his Endurance turbine. But in this case, the turbine still had outstanding finance on it and the feed in tariff was lower. This made for a very different set of economics and a different course of action by the owner.

Again, we found that in addition to a cracked bedplate this turbine also needed a shaft upgrade and gearbox overhaul. Given the finance on the machine, the cost of the fix and upgrades just didn't stack up.

Natural Generation is backed by a 130 year old family-owned investment house called the Constantine Group, part of which is Constantine Wind Energy. CWE has a large portfolio of wind turbines of its own and is always looking to add more.

In this case, the economics of the turbine did not justify the customer fixing the machine at his cost, but CWE were able to offer the customer a purchase

deal which took the issue, and the turbine, off his hands, in return for a one-off lump sum and a yearly ground rent for the life of the turbine.

The customer was happy to let someone else take over the management of the machine. The money he received from CWE allowed him to invest in new farm equipment and the ground rent will provide useful extra revenue for years to come.



When your asset becomes a liability, let us guide you to the best solution. Call us for a chat on 01872 571700.

Shouting from the rooftops

SCILLY GAMES

Final installation phase of Cornwall and Scillies Smart Energy Islands project

We were proud to be selected as primary installer for the prestigious Hitachi-led Cornwall and Scilly 'Smart Energy Islands' renewable energy project in 2018. This year we were asked back to complete the final installation phase of the project.

We offered a unique mix of skills to make the final installation work as quickly and easily as possible: our photovoltaic (PV) installation expertise, local knowledge and experience with battery storage systems, were an important element of the project. Six technicians went to the islands for the 6 month installation project, returning home at weekends.

Alice Clarke, our Solar Works Manager, says "It was great to be asked back to finish off a project that was so important to us last year, and really satisfying to see all the loose ends tied up. It was a treat to spend a bit more time on the Scillies too, and we all enjoyed the change of scenery. Even so, we were happy to sign the job off on time and on budget".

More work is shaping up under the BEES Business Energy Efficiency Scheme. This provides businesses based on Scilly with 60% grant funding for energy efficiency improvements based on solar and other technologies. Any customers interested in this scheme should contact Alice for a chat.



If you would like to speak to our PV team, please do give us a call



Grid protection relay changes – what does this mean to you?

As you may be aware, the National Grid is rolling out a requirement to change the settings of the Grid Protection Relay fitted to your wind turbine. You will be required to make the necessary changes before February 2022.

The National Grid are offering to fund the work required to make the changes. However, the funds are limited, so will be allocated on a first come, first serve basis. Each month there will be an application available.

It is possible that you have received letters from various companies seeking your authorisation to complete the necessary works. We will email you an information pack shortly, please contact us if you'd like a paper copy posted to you as well. This is not a scam and is a required action.

If you would like advice on your G59 relay
please give us a call on 01872 571700

Congratulations to our new Senior Works Manager in Wales & the Midlands

How does your new role fit within the company structure?

My new role as Works Manager for Wales and the Midlands, is endeavoring to guide and oversee the day to day operations, working alongside my counterparts in the North and South regions. As jobs, situations and expectations change we deliver solutions through problem solving, generating fresh ideas and implementing them to eventually getting the customer's turbine generating again.

In your opinion what qualities do you think make for a good Wind Tech?

The best qualities I see in our Technicians are a positive attitude and willingness to listen to each other, a distinguished mechanical and electrical skill set is desirable. It is essential that our guys have a strong mind set; surviving the elements over the next few months in this physically demanding role is key.

What do you like about working for Natural Generation?

The renewable energy sector has been my space over the past 15 years and when I moved to the UK, Natural Generation was a company I wanted to align myself with. Everyone comes to work with the same "can do" attitude and we get stuff done. I could see the potential and with recent appointments over the past year I'm excited to be a part of this great company moving forward.

If you could switch jobs for a day within the company whose job would you want and why?

I have a passion for safety and if I had the chance to switch jobs for the day I'd choose, the role of Safety and Compliance Manager. A very stressful role at times; although knowing that everyone goes home safely to their families and loved ones each day because of the policies and procedures you have implemented behind the scenes would be very rewarding. Always remember "Safety is everyone's responsibility, every day".



Todd Daley, Senior Works Manager for Wales & the Midlands

What advice would you give to prospective Wind Technicians wanting to join the company?

It's a challenging role at times that does require working at height, being away from home and constantly battling with the UK weather, however if you have a passion for green energy and building & construction it's a great way to develop your skillset and become part of this evolving industry. I think it's a great role where you are part of a team which ultimately teaches you to think outside the box.

Don't wait for your FIT provider to go bust - we're here to help!

2019 has so far seen 6 licenced Feed In Tariff providers go under, including Solarplcity, Brilliant Energy, Economy Energy and Our Power.

We are hearing from customers who are uncertain how to change provider and get hold of money owed after the demise of their existing licensee.

Natural Generation is always here to support and advise our customers.

The first option is to wait and let OFGEM do the work for you. As the regulating authority, OFGEM will let providers bid to become your new supplier. However, this could take some time so if you need to access your funds quickly we recommend you source a new licenced provider. You have the right to change your FIT provider at anytime.

1. Notify your current FIT provider you wish to switch as there may be a notice period applicable.
2. Approach the new FIT provider either by contacting them directly or completing their FIT sign up form.
3. The new supplier will then request the switch from the original FIT provider and a switch date will be agreed.

For more information about FIT licenced electricity suppliers see the OFGEM website www.ofgem.gov.uk

If you would like to advice on changing your FIT provider please give us a call on 01872 571700

New Wind Maintenance Contracts now available - call us to upgrade today 01872 571700

Endurance E3120	Bronze	Gold	Platinum
Preventative Maintenance Servicing as per manufacturer's service sheet including service kit and consumables.	every 5000 rotational hours	every 6 months	every 6 months
24/7, 365 days a year Remote Monitoring A dedicated team of wind monitoring technicians will observe your turbine around the clock. 24/7 365 days a year. Remote fault diagnostics and resolution where possible.	✓	✓	✓
Emergency Telephone and E-mail Support Available 24/7, 365 days a year.	✓	✓	✓
Online Monitoring and Reporting Platform Customer access to online monitoring platform and fault notification reporting.	✓	✓	✓
Reactive Labour Labour for all reactive on-site works relating to issues affecting generation (excluding specialist subcontracted works).		✓	✓
Condition Monitoring Specialist hardware installed in your turbine, providing early warning of irregularities to help avoid major incidents.			✓
Reactive Parts* Parts for reactive on-site works relating to issues affecting generation.			✓
Availability 95% Availability Guarantee.			✓
PRICES FROM £3250 *T&Cs apply			

On-site labour rates (applicable to Bronze Reactive and any additional services)

Call out fee Includes travel and first hour on site (up to per team of 2)	£200 England, Wales & Scottish mainland
	£200** Scottish Islands & Northern Ireland
On-site labour rate	£45 per hour per engineer

Northern Power Systems	Bronze	Gold	Platinum
Online Monitoring and Reporting Platform Customer access to online monitoring platform and fault notification reporting.	✓	✓	✓
24/7, 365 days a year Remote Monitoring A dedicated team of wind monitoring technicians will observe your turbine around the clock. 24/7 365 days a year. Remote fault diagnostics and resolution where possible.	✓	✓	✓
Emergency Telephone and E-mail Support Available 24/7, 365 days a year.	✓	✓	✓
Preventative Maintenance Servicing as per manufacturer's service sheet including service kit and consumables.	✓	✓	✓
Reactive Labour Labour for all reactive on-site works relating to issues affecting generation (excluding specialist subcontracted works).		✓	✓
Reactive Parts Parts for reactive on-site works relating to issues affecting generation (excluding Generator, Tower, Blades, Rotor and Foundation) are included in the annual fee.			✓
Availability 95% Availability Guarantee.			✓
PRICES FROM £3850 *T&Cs apply			

On-site labour rates (applicable to Bronze Reactive and any additional services)

Call out fee Includes travel and first hour on site (up to per team of 2)	£200 England, Wales & Scottish mainland
	£200** Scottish Islands & Northern Ireland
On-site labour rate	£60 per hour per engineer



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