

Electrical Power Services
High & Low Voltage Installations
Condition Monitoring & Engineering Solutions
Transformer, Switchgear &
Substation Maintenance



***Transform
Energy***

...powering industry



Welcome to Transform Energy Maintenance Services Ltd

We offer the customer a fast, flexible and effective approach to all High Voltage System Requirements.

Our pro-active 'can do' approach to customer service is backed up by our collective experience and expertise in HV service and operation. Our Engineers have practical experience in maintaining, testing and calibrating all areas of HV network support.

We are a specialist contractor that offers a wide range of industrial services including:

- High Voltage & Low Voltage Switchgear Installation and Maintenance
- Total Transformer Maintenance
- Transformer Insulating Oil Analysis
- On Site Oil Purification
- On Site Painting Services of all Outdoor High Voltage Equipment
- Tap Changer Switch Maintenance
- Short Circuit Analysis & Protection Studies
- Cable Fault Location, HV & LV Cable Jointing Services
- Power Factor Correction
- Power Quality Surveys and Analysis
- Battery Tripping Units
- Condition Monitoring- Vibration Analysis & Thermography
- Laser Alignment
- Partial Discharge Ultra TEV Testing
- Operation & Maintenance Agreements
- Safe & Robust Operational Process and Procedures

Who we work with...

We deal with many key sectors of industry throughout the UK ranging from small sole traders to large multinationals.

"We help our customers build their project and build a winning relationship together."

Why Transform Energy?

All HV networks have to be inspected and maintained on a regular basis in order to ensure optimum performance to comply with current legislation.

We work with you to agree a schedule assuring minimum disruption to your business while giving you the peace of mind that your equipment is working efficiently, effectively and safely.

Our mission...

"To be the contractor of choice for all our clients, upholding the standards our clients expect ensuring an absolute commitment to safety, delivering quality service, first time, every time and when you, our clients want it."

We pride ourselves on the service that we offer. Service that is available to you when you want it!

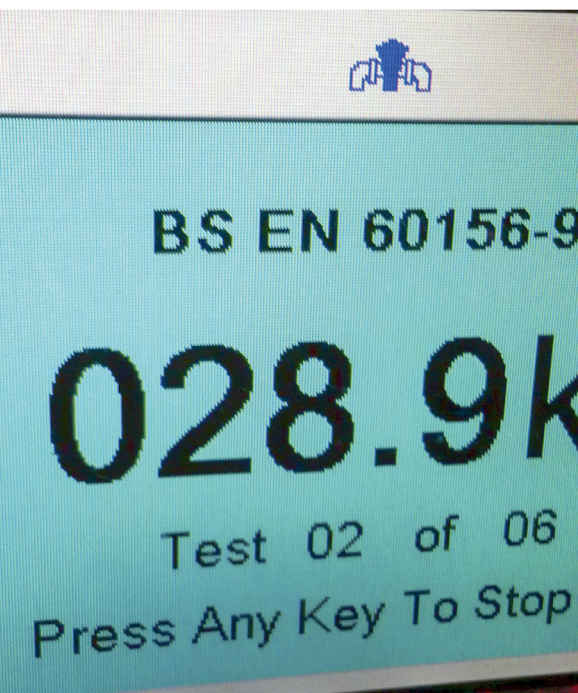
Willing to go the extra mile to help our customers regardless of company or order size.



Insulating Oil - Total Care...

We offer a total service to keep your insulating oil within **BSEN:60422:13**, on site oil sampling, transformer oil testing, certification and on site oil purification.

We are committed to the environment - on site oil purification offers a cost effective and environmentally friendly alternative to changing the insulating oil.



ON SITE OIL SAMPLING

- Experienced qualified engineers
- At your convenience

TRANSFORMER OIL TESTING

- Routine analysis to include dielectric strength acidity and moisture content
- Dissolved gas analysis and furans analysis also available
- Oil test certificate issued with recommendations
- 24 hour Emergency oil testing service
- On site oil testing available

ON SITE OIL PURIFICATION SERVICES

Mobile filtration units ready to carry out oil purification on your site. Purification will improve the insulating medium by increasing the dielectric strength, reducing the water content, degassing the oil and reducing fibres.

- Cost Effective & Environmentally Friendly
- Reduced or no down Time
- Certification Issued



HV Switchgear Serviced...

For compliance to the Electricity at work regulations 1989, all electrical equipment must have a schedule of maintenance.

We have trained engineers with vast operational experience in maintaining, installing, testing and commissioning power distribution networks.



LEGISLATION

Transform Energy strives to assist your business, not only in compliance to the Electricity at work regulations 1989 and the Health & Safety at work act 1974, but also to keep your operations running smoothly and to the highest standard without unwanted power interruption.

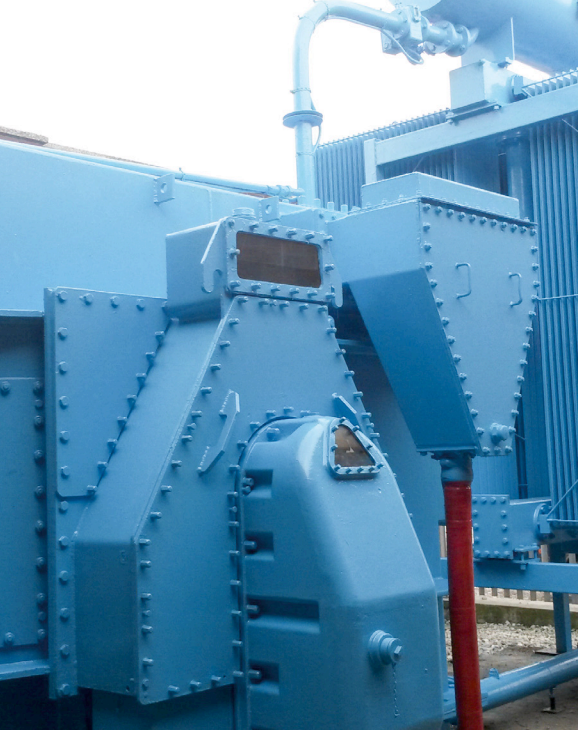
HV & LV SWITCHGEAR MAINTENANCE

We are committed to responsible power engineering and flexible maintenance solutions. We offer bespoke scheduled maintenance packages that fit with your business and production commitments, minimising the impact of downtime in power outages.

SAFE & ROBUST OPERATIONAL PROCEDURES

Transform Energy is dedicated to safety and safety is our priority. Therefore, if your business does not have any Authorised Personnel on site, or they are simply busy with their own operational duties, this service can be provided by Transform Energy.





Painting Services Protecting...

Maintaining a Quality of Standard Protecting your Electrical Infrastructure that drives your business.

Our engineers are experienced in refurbishing and painting outdoor switchgear, ring main units and distribution transformers.

We re-gasket leaking oil filled Transformers & Switchgear protecting and preserving the life of your distribution network.



1. Steam cleaning
2. Rust removal and treatment
3. Replacement of transformer cooling radiators
4. Spray painting and flow painting
5. Transformer compound refurbishment, including bund walls
6. Corrosion treatments with rust inhibitors
7. All necessary parts are masked to prevent paint over-spray. Transformers painted to specification
8. Radiator flow painting to achieve high paint build (This technique is advantageous in coastal areas and in arduous atmospheres)
9. Gate valves, breathers and auxiliaries are painted different colours for ease of identification

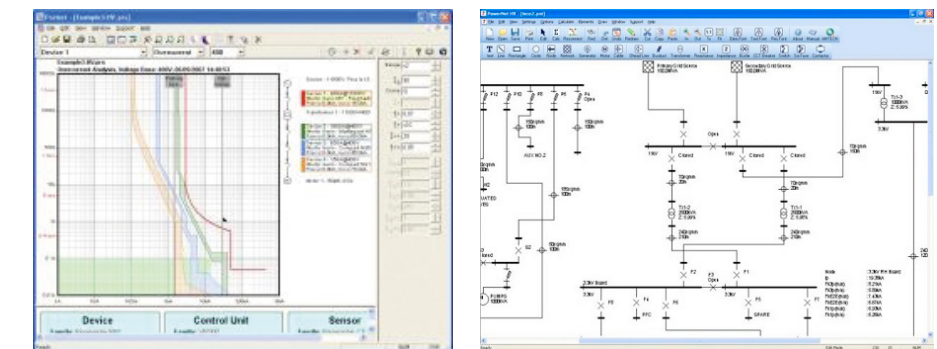
Preserving and protecting your plant



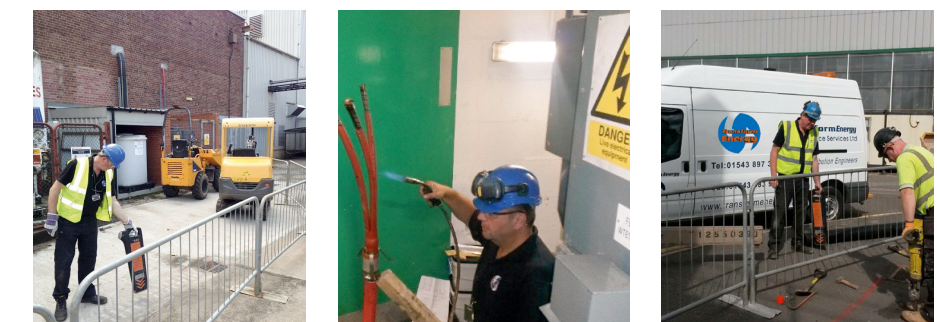
Protection Peace of Mind...

Short circuit analysis of your site for the calculation of short circuit currents to IEC 60909 and BS 7639.

Protection studies to ensure that your network is adequately protected, ensuring there is correct co-ordination, the most common cause of nuisance tripping.



Cable Fault Location, Cable Jointing Services and Excavations



We have a total commitment to the highest personal and professional standards

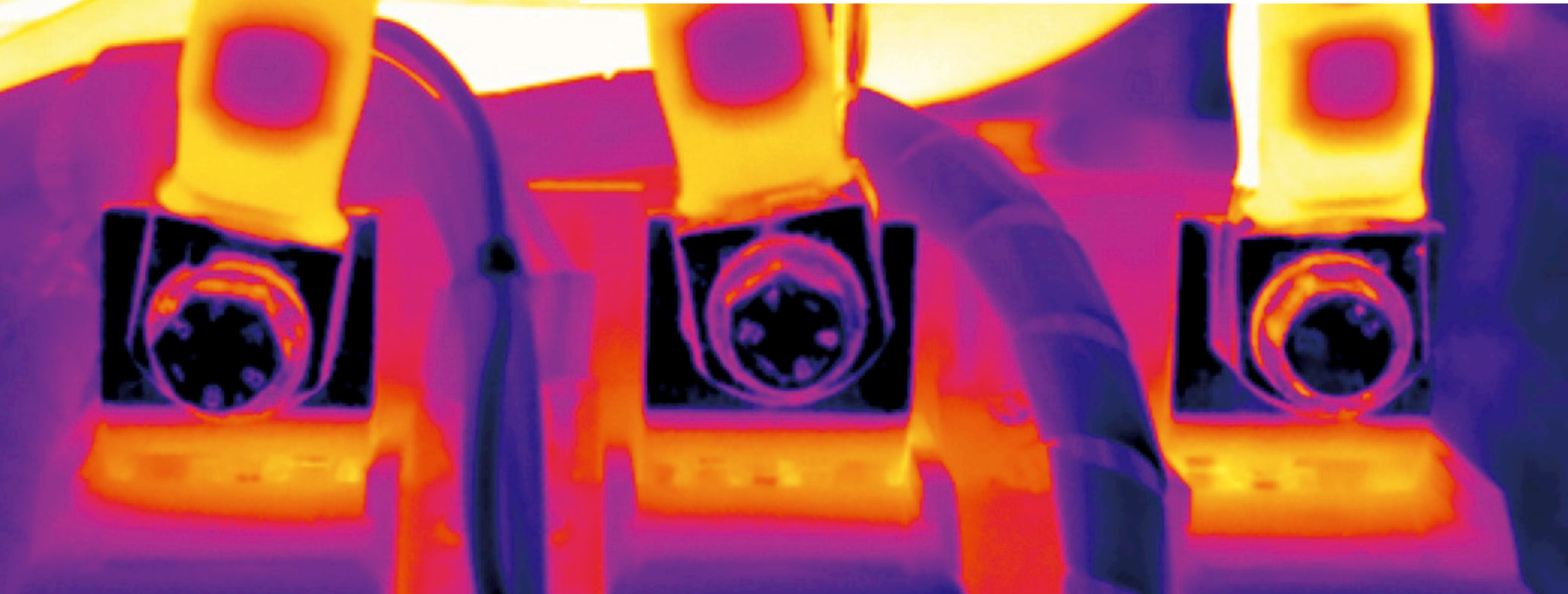


Condition Monitoring: Thermography

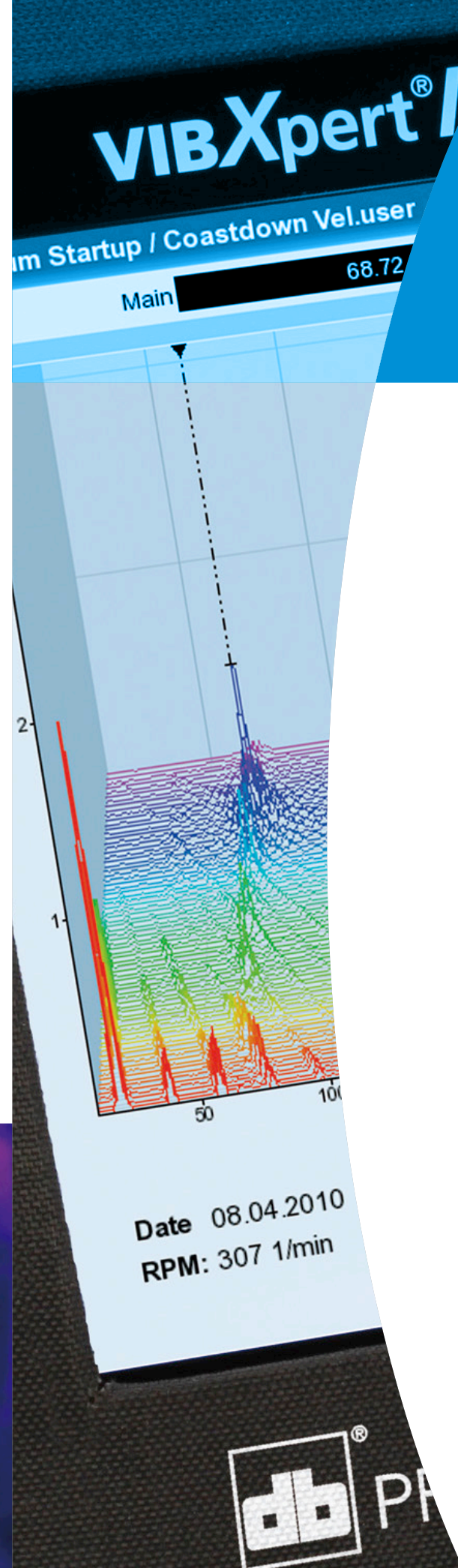
WHAT IS THERMOGRAPHY?

Thermography is carried out to eliminate any costly system failures that may occur within your business thermal imaging is the production of non-contact infrared, or “heat” pictures from which temperature measurements can be made and therefore looks for hot spots within your electrical systems.

- Examine your electrical system to predict when any maintenance is required, preventing potential faults from disrupting day-to-day activities.
- Detect and reduce the risk of component failure that could result in unplanned outages and injuries.
- Energy is spent generating heat, causing unnecessary losses.
- Reduce the potential for heat to rise to a point where connections melt and break the circuit; as a result, fires may occur.
- Besides loose connections, electrical systems suffer from load imbalances, corrosion, and Increase in impedance to current. Thermography can quickly locate these and determine the severity of the problem, and help establish the time frame in which the equipment should be repaired.



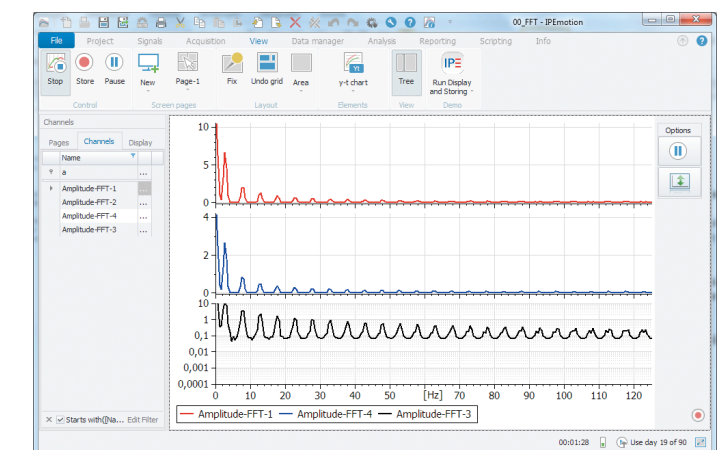
Safe, reliable and non-intrusive testing to predict potential faults



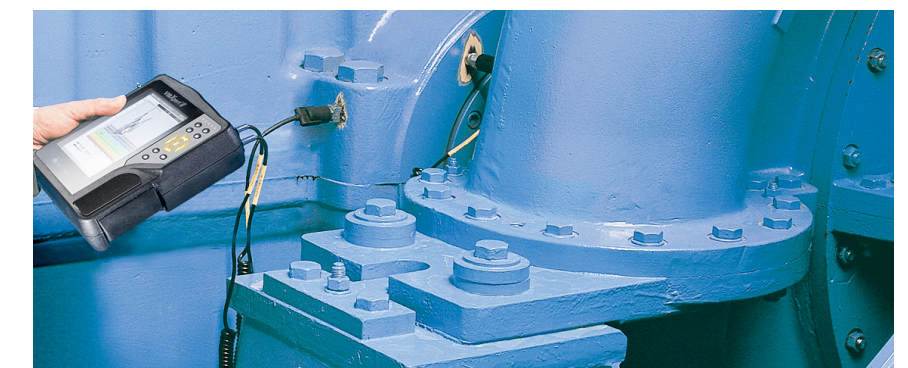
Condition Monitoring: Vibration Analysis

WHAT IS VIBRATION ANALYSIS?

Vibration Analysis is used to detect early precursors to machine failure, allowing machinery to be repaired or replaced before an expensive failure occurs.



- Early detection of mechanical fatigue and breakdown
- All rotating equipment vibrates to some degree, but as older bearings and components reach the end of their product life they begin to vibrate more dramatically, and in distinct ways.
- Ongoing monitoring of equipment allows these signs of wear and damage to be identified well before the damage becomes an expensive problem.
- Early detection can decrease downtime and increase savings



Reducing Costly breakdowns, helping you plan preventative maintenance



Laser Alignment

SHAFT ALIGNMENT

Reduce machinery breakdowns by up to 50% and increase your uptime.

It's a fact. Shaft misalignment is responsible for up to 50% of all costs related to rotating machinery breakdowns. Accurately aligning shafts can prevent a large number of machinery breakdowns and reduce unplanned downtime that results in a loss of production. In today's challenging environment of reducing costs and optimising assets, the necessity of accurate shaft alignment is now greater than ever.

WHAT IS SHAFT MISALIGNMENT?

Machines need to be aligned in both horizontal and vertical plane. The misalignment can be due to parallel or angular misalignment and in fact is a combination of both.

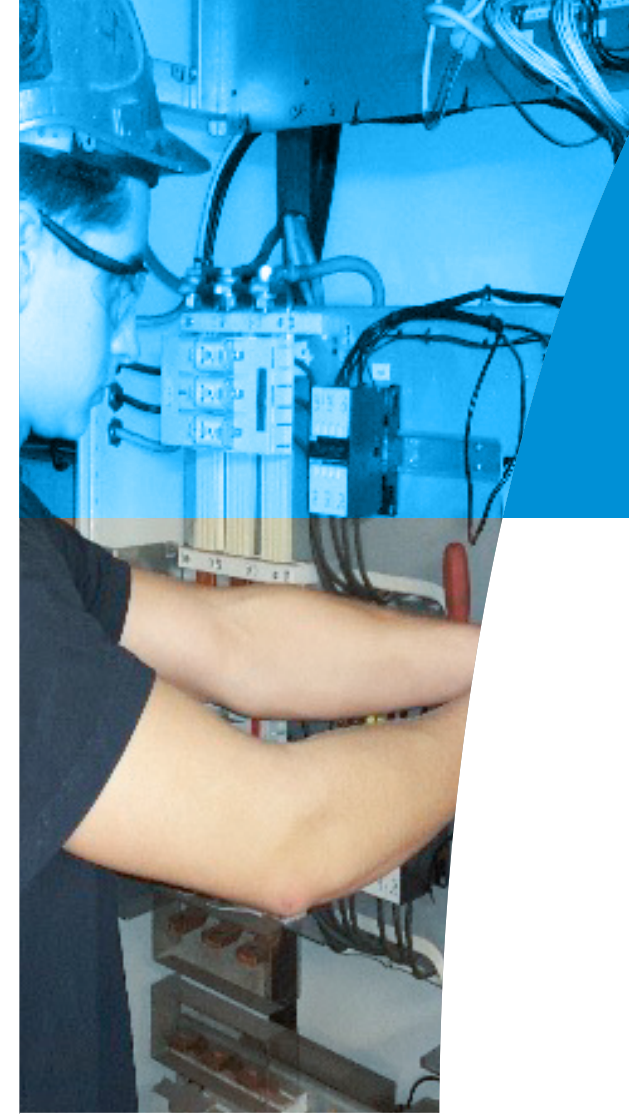


Partial Discharge Testing

Transform Energy offer Ultra TEV Partial Discharge testing.

The detector Kit is a portable partial discharge detector which detects both surface and internal discharge activity within medium voltage equipment.

Partial discharge activity causes insulation material to deteriorate and eventually leads to failure of MV equipment. With the Ultra TEV Partial Discharge Detector, surface discharge is detected using an ultrasonic sensor and internal discharge is detected using an electromagnetic sensor which can detect transient earth voltages or TEV's. All tests are carried out without the need for an outage.



Power Factor Correction

WHY IMPROVE POWER FACTOR?

THE BENEFITS THAT CAN BE ACHIEVED BY APPLYING THE CORRECT POWER FACTOR CORRECTION ARE:

- Environmental benefit. Reduction of power consumption due to improved energy efficiency. Reduced power consumption means less greenhouse gas emissions and fossil fuel depletion by power stations.
- Reduction of electricity bills Extra kVA available from the existing supply Reduction of I² R losses in transformers and distribution equipment
- Reduction of voltage drop in long cables. Extended equipment life, reduced electrical burden on cables and electrical components.

TRANSFORM ENERGY OFFER:

- On-site energy quality surveys complete with detailed reports
- Installation of new Power Factor correction
- Repairs to existing Power Factor Correction



Power Quality Survey and Analysis

The monitoring of electric power helps to identify the important power quality problems such as voltage sags and swells, interruptions, harmonics, and high-frequency noise, consistently seen in industrial and commercial grid applications. Troubleshooting these problems requires accurate measurements and analysis of power quality with monitoring instruments that can effectively locate issues and identify solutions.



We can't wait to hear from you Contact us...

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an approved contractor

