

O&M COMES OF AGE

Millions of pounds can be saved through intelligent operations and maintenance contracts designed to reduce downtime to a minimum.

MAJOR SAVINGS

O&M is now an expanding frontier for wind innovation and efficiency – where potential offshore downtime costs can be cut by up to 30%, and often more.

The starting point is a series of probing questions. These are designed to show how many traditional time-inefficient work scopes can be delivered better together. The result is 12 modern cost-efficient O&M packages.

How these packages are delivered is important. To maximise savings, skilled O&M implementation teams are trained to eliminate costly duplications and disruption before they happen.

However, because offshore conditions change rapidly, rescheduling individual tasks swiftly around moving weather windows, equipment failures, accidents and supply delays is vital if expensive vessel, men and machinery stand-by time is to be minimised.

Green Marine Solutions (GMS) is a pioneer in this critical area where it is helping to make major in-roads into multimillion-pound downtime losses. The net benefit for managers is unprecedented levels of financial and technical control over valuable assets that can be measured on the bottom-line. Health, safety, environmental and quality performance are rising in parallel.

With crew transfer vessels costing many thousands of pounds a day, and construction vessels tens of thousands, this is critical stuff.

FREEDOM TO RESPOND

High wind industry costs mean that modern O&M is increasingly being delivered through versatile modules built around weekly, monthly and annual calendars. Flexibility means that tasks can be executed to high quality levels for a guaranteed fixed lump-sum price. All risks lie with the confident supplier.

As a confident supplier, GMS puts a powerful combination of extra O&M skills into its work packages. These include extensive marine coordination and vessel management expertise gained on large UK and European offshore wind farm projects. It also adds competencies in auditing, inspection, specialist repair and maintenance work, compliance and essential documentation.

The company's introduction of four-man O&M teams who can switch over instantly to have emergency and rescue operations up and running very quickly in a tough environment if things do go wrong is further added value that helps to cut critical risks and losses.

VESSEL DOWNTIME LOSSES

The scope for O&M savings is illustrated clearly by recent vessel utilisation data. By one reliable estimate, work and transfer boats are typically effective for a little over 55% of their charter time averaged out annually. Because vessels are usually chartered for a year, this means that only some 190 days annually may be really productive.



Richard Pargeter

The corollary is that without active intervention, 170 days are easily lost, often at an unacceptably high price.

However, real losses may not end there. When vessel time is lost, the activities they support are lost too. In the case of neglected maintenance and repair work, the knock-on risks of failure or poor performance can multiply up quickly. GMS' response has been to manage the cost of not only weather but all other planned and unplanned delays out of the equation, a popular development with contractors.

"As wind operators, we understand the capabilities of vessels, the state of the sea and where vessels can and cannot operate safely," explains GMS Operations Director, Richard Pargeter. *"We use this knowledge, coupled with the skills of our expert teams in all areas of O&M, to save clients time and money,"* he adds.

"We welcome searching questions from clients, just as we ask many fundamental questions ourselves. A lot of what we offer may sound new but is a very logical development whose time has come. Asking the right questions is the key to unlocking serious potential. But each project is different."

WIND OF CHANGE

GMS' strategic O&M reappraisal has turned what used to be a Cinderella activity into major opportunities for greater productivity in an industry that urgently needs to cut costs. Its innovation is a holistic view of what is really needed to keep wind farms running at peak efficiency.

With client approval, the company replaces old rigid scheduling systems with an extremely versatile approach that puts prioritised tasks, vessel availability data and manpower skills into a moving matrix which is constantly matched against forecasts, incidents, accidents and unforeseen events.

When conditions do then change, O&M teams are ideally-positioned to move quickly onto other jobs, boats, locations, and even to other clients and contracts, to make productive use of lost time. The company believes that extra business value can always be created somewhere.

This philosophy was developed during the successful construction phases of several east coast offshore wind farms, including Greater Gabbard. GMS is currently applying it to increase O&M efficiency on C-Power's Thornton Bank wind farm operating off the Belgian coast. Ben Colbrandt, of C-Power HSE, believes GMS' O&M thinking brings a crucial new QHSE and commercial perspective. This commercial emphasis is proving to be the correct route for reducing risks, costs and ultimately giving C-Power invaluable project control that benefits everyone, he says.

LUMP-SUM PAYMENTS

A key benefit is the payment structure. Because it routinely minimises lost work time, the company confidently offers a lump-sum payment system to replace costly day-rates.

From a client perspective, this removes many risks and uncertainty. It also means that no vessel trips are wasted. Where previously three, four or five costly turbine shutdowns were needed, these are often replaced by one single well-planned downtime period. Everyone wins.

GMS starts projects with a detailed desk review, followed by a comprehensive on-site audit. All data goes into the O&M solutions matrix. Twelve different work packages with interlocking scopes are then matched carefully to the results.

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MODERN MARINE CO-ORDINATION

TRAINING TO SAVE HARD CASH AND TIME AT SEA

Marine co-ordinators can save millions of pounds at sea. A pro-active approach is essential. Training is vital.

ON-THE-JOB SKILLS DEVELOPMENT PACKAGE

Green Marine Solutions (GMS) delivers its own unique on-the-job skills development package. This combines the many modern skills and disciplines marine co-ordinators (MC) today have to bring to one of the wind industry's most responsible jobs.

The offshore environment is evolving quickly. MCs must be able to sequence, monitor, meet moving deadlines and respond positively to incidents as technology advances. The day of the experienced seafarer equipped with only a radio is over.

The management matrix is now too complex for guesswork. Potential liabilities are high. Downtime is expensive.

CONSTANTLY IMPROVING EFFICIENCY

Alex Harrison leads GMS' marine co-ordination programme. This shows candidates how to constantly boost efficiency while managing out losses and delays. Alex believes that MCs must be able to identify conflicts and predict problems before they happen, saving clients money they didn't even know they were in danger of losing.

"With crew transfer vessels costing many thousands of pounds a day, and construction vessels tens of thousands, there is plenty of work for active MCs to tackle" he says.

THORNTON BANK WINDFARM – AN EXAMPLE

At present, GMS channels MC training to its own service delivery teams. However, it also delivers training to clients' own teams – an example being on C-Power's Thornton Bank wind farm operating off the Belgian coast.

The training is vocationally-based and follows a fixed and measureable programme. MC training covers nine key competencies – operational communication, emergency response, chartwork, general maritime, meteorology, seamanship, plus IMO, IMDG and SOLAS.

Many trainees already have a core knowledge. Training is designed to refine this further.

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