

Alliance appliance

The Cleeton Alliance, assembled to install a gas compression platform in the Southern North Sea, is breaking new ground. In this report, REview discusses how the contractors are committed to the success of the project well after production has started.

‘Our thinking is coloured by the fact that we are looking ahead to the operations phase’

Everything is working well for the Cleeton Alliance, the team assembled by BP to construct and install a gas compression platform in the Southern North Sea. Costs have steadily fallen as the platform has taken shape. A project that started out with a budget of £40 million has a good chance of coming in at nearer £30 million, and under the alliancing concept the difference will be shared between BP and the contractors.

But what makes this project really special happens after the construction and commissioning phases are over. The contractors will not just raise their glasses and drink a farewell toast; they will continue to take a very close interest in the platform during its first two years of operation.

The contractors in the Cleeton Alliance have broken through a significant barrier in project life, by being involved not just in the capital stage but by being committed well after the installation is up and running. The team is writing a new chapter in alliancing and, with commissioning due next year, is on target to make sure there is a happy ending to the story.

The Cleeton Compression platform is designed to enhance production of gas from two major SNS reservoirs – Cleeton and Ravenspurn, 30 miles off the east coast of England. The new platform will be located at one corner of the existing platform and in technical terms is conventional. In business terms, however, it represents an important advance in the way BPX works with its contractors.

BPX project manager Chris Harrison, one of only three BP staffers on the project, explains: “It may only be a small project, but in alliancing terms it is at the forefront of BPX, which is at the forefront of BP, which is at the forefront of the industry. So there is potentially a lot of interest.”

Alliancing replaces the traditional adversarial relationships between the principal and contractors with a cooperative “win-win” approach. It was decided to take the gainshare ideas developed in earlier projects such as Hyde and Andrew a stage further. Specifically, in addition to covering the construction phase, the risk and reward sharing was to last for two years into the production phase. As sole owner, BP was in a good position to try the new approach.

This meant a crucial change in thinking. The emphasis was firmly on meeting the real world needs of the operations team rather than just matching the specification at the lowest possible price. The whole team has a vested interest in ensuring that the operations phase functions smoothly.

“Historically, the contractor’s profits increased in line with the capital cost increases if the customer wanted to make significant changes,” says Harrison.

“We have been able to move on from those days with a remarkable degree of success. Everyone has an incentive to make sure not only that the capital project is delivered on time and below budget, but that it is done in such a way as to ensure there are no hitches in the operations phase.”

The companies which were successful in the tendering phase – Trafalgar John Brown for engineering; BARMAC (Brown & Root McDermott Fabricators), responsible for building the jacket and topsides; Dresser-Rand, which is supplying the gas turbine driven compressor; and SHL, in charge of transport and installation – had to follow up with bids for the amount of risk and reward they were prepared to accept in the project. Some of the partners were more familiar with the concepts of alliancing than others, but together they bid for more risk and reward than was actually on offer.

Members of the Alliance were taken away on a series of team-building exercises before the project launch. For the design phase of the project, the Alliance is based in Paddington, London, and it has evolved its own distinct culture. It works by its own rules, too, far removed from the traditional approach

in a project of this kind. Indeed, a key element of the Alliance’s mission statement is: “This is NOT business as usual.”

All member companies are incentivised to do well, both now and in the production phase. If one of the partners runs into difficulties, the others help.

“We tried to make the gainshare system simple enough to be workable, though with enough bite to make it effective,” says Harrison. “All our day-to-day thinking is coloured by the fact that we are looking ahead to the operations phase. Our objective is to achieve ‘outstanding success’ but not to the detriment of the long-term operating efficiency of the platform.”

From the project’s sanction to the present, the Alliance has made a habit of doing things differently. Examples include linking the performance of the project team to specific key success factors; and con-

centrating on working as a single, cohesive team – the main prerequisite for achieving outstanding success. Being flexible at the design stage enabled major savings to be made, for example by making the platform a three-leg rather than a four-leg type.

A more expensive driver for the gas turbine compressor was chosen – because it will use less fuel and need less maintenance in the operations phase, and thus prove more cost-effective in the long run. Under a more traditional way of working, the least expensive unit would have been chosen for the sake of keeping capital costs down.

Steel buying, originally the responsibility of one partner, was taken over by another to improve cost effectiveness. Suggestions from the fabricator to the design team to make the design more “fabrication friendly” and reduce the number of steel thicknesses – improbable in the past – were adopted, leading to major savings. Major design modifications were introduced at a late stage to deal with potential salt deposition problems in the compression train. “In the old way, such significant design modifications (involving the incorporation of a filter coalescer vessel more than nine

metres high) would have meant the contractor taking us to the cleaners. In the Alliance, where we have complete transparency, we were able to resolve it,” says Harrison. “If we can reduce downtime in the operations phase, it is in all our interests, so we were able to take appropriate measures with minimal disruption.”

The hook-up to the existing platform has an ambitious target of just two days interruption of gas export – again, with suitable rewards and penalties.

Although the principles of alliancing were not in general extended to sub-contractors and suppliers, use of incentives proved invaluable in one instance. A supplier of one particularly critical item was given a bonus if he could beat the target delivery date. The item was delivered on schedule – just before the company declared it was in financial difficulties. Harrison believes that without the incentive, the component would probably have ended up in the hands of the administrator rather than those of the Alliance.

“In the long-term, my view is that we can build on the alliancing principle by developing it with smaller suppliers. Small firms are not going to accept a great deal of risk, but they can be incentivised.”

Harrison believes there is no going back. “It’s very exciting and I cannot see anything but this way of doing things being developed further. We are exploring new areas with each new project. In future, for instance, I believe we can get the thing up and running much quicker and more effectively.”



MAIN PICTURE – A 3D computer model of the compression platform.

INSET – How the finished Cleeton complex will look.

BELOW – The compression deck structure leaving the paint shop at BARMAC’s fabrication yard in October.

