





Heavy lift installation assictance for Cape Sharp Tidal

Novembe 2016 - In early October the BBC Emerald, a heavy lift vessel from the BBC Chartering arrived at Pictou shipyard to load Cape Sharp Tidal's 2nd Turbine and ts foundation for a final destination of Saint John. The BBC Emerald was chartered in for the project by Hughes Off-shore and Shipping Services Inc. to carry out the project for Cape Sharp Tidal, a joint venture created by Emera and OpenHydro. Cape Sharp Tidal planned the install of the pair of 2MW tidal turbines in the Bay of Fundy to be the first grid connected marine turbines installed in the Bay of Fundy.

The 320 mts Turbine no. 2 as well as its foundation (444 mts) were loaded at its fabrication yard in Pictou. The subsea base was brought alongside in floating condition and loaded from the water to deck of BBC Emerald having an overhang of 4 m to starboard and 13 m to port side. This made the discharge of the SSB to shore in Saint John even more challenging considering an impressive local tide range of 9m.

Later on the BBC HLV met the installation barge "Scotia Tide" and removed turbine no. one from the installation barge to the deck of

the HLV for further transport and discharge to shore. The turbine had to be lifted vertically out of its foundation stanchions and turned into a horizontal orientation for stowage on deck.

Finally the 2nd turbine was discharged to the "Scotia Tide" for final installation scope.

The whole job had been well planned in advance including a lot of engineering hours spent by BBC Chartering. BBC met the expected time frame and budget and performed this job to customer's full satisfaction.

Heavy-lift diligence

Raymond Fisch, Senior Vice President Strategic Projects, BBC Chartering dropped in to PES to bring us up to date on the latest news from this no. 1 global, heavy-lift specialist. Despite the volume in increased traffic, planning diligence, customer care and quality are never compromised.

PES: Welcome back to PES Wind magazine. Thanks for talking with us. For our new readers would you like to begin by explaining a little about the background of BBC Chartering and how you currently serve the wind industry?

Raymond Fisch: Thank you. BBC Chartering goes back some 20 years and in that time significantly shaped the segment of industrial transport solutions for a variety of industries.

We feel privileged to have supported so many projects in the energy, resource and infrastructure sector worldwide and of being a trusted partner of the global project shipping community.

Since the beginning of the green revolution BBC Chartering has also evolved as leading carrier, for the global wind industry. With our current fleet of 180 vessels, there is no trading request we cannot match, giving our customers highest value through flexibility, reliability and performance in project shipping.

PES: Is the wind industry an expanding sector for you?

RS: The transport volumes in the wind energy sector keep growing and we see a good flow of business, however

the current shipping market is difficult and we need to win our points against other competitors in this sector.

Many of these go after this business as a short term strategy only, seeking to fill their ships under demoralising terms. Sometimes it seems easily forgotten that quality carriers, such as BBC Chartering, also invest a great deal of resources to respond to sophisticated customer demands, with quality solutions all over the world.

PES: We see that you have been working on the Cape Sharp Tidal Project, can you tell us about this project? What it is, where it is situated, your involvement etc.?

RS: The Cape Sharp Tidal project is a major tidal power plant in the Bay of Fundy, Nova Scotia, Canada. In their ongoing effort of optimising power solutions at Cape Sharp Tidal, the joint venture partners Emera Inc. and OpenHydro wanted to further upgrade their tidal array and sought a solution that would enable them to move and transfer, a set of turbine and subsea base, from Pictou to St. John during October 2016.

The heavy-lift vessel BBC Emerald was chartered in to assist this project. The vessel is a 14.300 dwt heavy-lifter which has 2x 450mt lifting capacity. Due to the overall requirements of the project, this vessel was the ideal candidate to work in the designated loading and unloading locations in the Bay of Fundy.

PES: Can you describe the type of components you transported for this project?

RS: We loaded a 320 tonne turbine and a 444 tonne foundation at the fabrication yard in Pictou, for discharge at Port Saint John. We also transferred the previous turbine and foundation from the installation vessel to shore and later the upgraded turbine and subsea base onto the installation vessel.

PES: Did you encounter any specific problems during transportation or offloading? Did you manage to keep to the planned timetable and remain on budget?

RS: The task of loading and delivering heavy-lift and oversized cargo was complicated by the Bay of Fundy's notorious tidal range, which measures about nine metres high at Port Saint John.

Moving the cargo, i.e. the turbine and its subsea base, both oversized with regards to weight and dimension, is considered a highly specialised niche capability in the shipping industry.

Operating the cranes, lifting, turning and transferring the cargo, ballasting the vessel, not only requires a very particular type of vessel, but also an experienced crew to execute this kind of high impact operations.

It cannot be carried out without the respective asset, engineering capacity and experience of the executing resources. Everything went as planned, within budget and to the fullest satisfaction of our customers.

PES: On this type of project, how much time do you spend before your proposal becomes an order and before



you can begin the transportation phase?

RS: There is no standard time and much depends on the decision making process on the customers' side, too. It can range from a few days or weeks up to months.

Sometimes there is an overlap of tasks, which often results in an advance performance from our side. But frankly speaking, diligence in planning and engineering is always key and it is without question, we do not compromise on this for any required solution.

PES: Can you explain your HSEQ strategy for this project, i.e. have there been any special requests?

RS: In our HSEQ strategy we commit ourselves to demonstrate excellence in health, safety and quality, gaining recognition as the project carrier of choice to our clients. We value ethical, responsible and lawful conduct and strive to minimise environmental impacts, meeting both regulatory requirements and stakeholder expectations.

BBC Chartering GmbH is certified by DNV GL for its ISO 9001 quality management, ISO 14001 environmental management and OHSAS 18001 for occupational health management. We work along those lines and under strict considerations of our customers' HSEQ plans.

PES: What makes BBC Chartering stand out from the other heavy-lift sea transport companies?

RS: We have contributed significantly to the development of the project shipping industry over the past 20 years and we continue to do so by staying at the forefront of heavy-lift shipping technology and services. As the industry currently finds itself in an ongoing consolidation phase, it



is still our goal to move and improve, sharpen our profile and work to become more efficient in providing our services. We do not compromise on delivering what is expected by our customers.

We continue to win our business based on the outstanding performance we deliver and the trust our customers have in the quality and reliability of our solutions.

We continue to provide a ready capability for our customers, so we are able to adopt to any new or changing requirements and of course, by providing skilled resources all the way through a project, with the most experienced and best trained people in project shipping.

We combine this with integrity, by applying an unimpaired condition, honesty and fairness. Through this we feel privileged to be the #1 project carrier in the world, who can provide an unparalleled service for any port, any cargo worldwide.

PES: How is the rest of 2017 looking for BBC Chartering in our industry?

RS: There is much interest in the solutions we provide and we continuously work on inquiries for projects all over the world. We happily

evaluate all possibilities and do our utmost to win trust in our proposed solution and then win the business.

In close collaboration with customers and tonnage partners, we have the global set-up to offer the most competitive solutions for our customers, and they appreciate this.

We like to adopt Henry Ford's quote: 'A market is quickly saturated by a bad product, but it's never saturated by a good one.' The same goes for our service.

















Turbine lifting and transport under deck







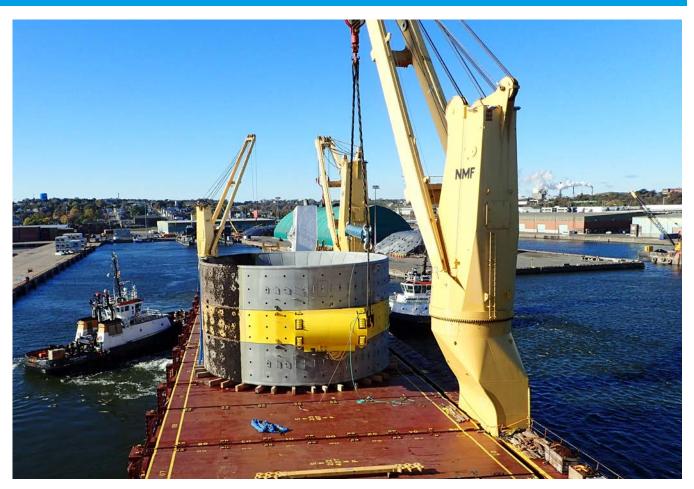


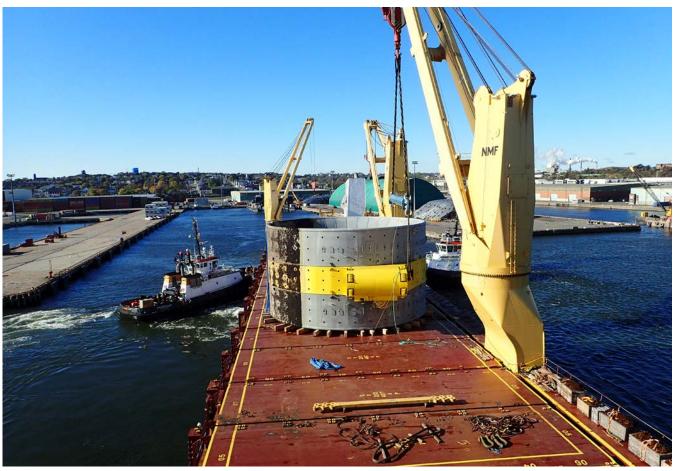






Turbine transport on deck



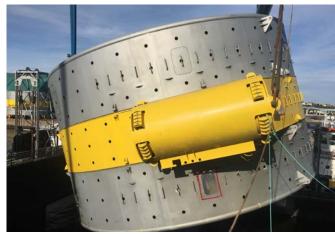


Turbine Lifting in/out Open Hydro installation barge















SSB Lifting and Shipping

