



O&M Manager Nordsee One, Sönke Scholl has made a long term service and maintenance agreement with the Danish service provider Semco Maritime comprising full service and maintenance of the offshore substation and all the wind turbine foundations (Copyright Nordsee One).

# The value of continuous, preventive maintenance

At PES we know that maximising uptime and reducing costs are essential to the offshore wind power business. Semco Maritime helps offshore wind farm operators do exactly this by offering full service and maintenance concepts for offshore substations and wind turbine foundations - the so-called transition pieces.

Semco Maritime helps offshore wind farm operators maximise uptime and drive down operational costs by offering full service and maintenance concepts for offshore substations and wind turbine foundations, the so-called transition pieces. It is simply good business to have a pro-active approach to maintenance because it prevents break-downs which cause costly downtime during repair.

'After building and commissioning close to 20 offshore substations in the North Sea area we discovered a gap in the market. We found that offshore wind farm operators spend much time and energy on coordinating the work of a large number of service providers. Therefore, we are now offering a full scope service concept whereby we release time and resources for the operator enabling him to concentrate on the operation of the wind farm,' says Bjarne Christensen, Director of service operations at Semco Maritime.

## Certified specialists

Semco Maritime have more than 30 years of experience in the offshore industry with modifications, maintenance and service for operators of oil and gas installations and offshore wind farms. They know the industry inside out and they possess the required range of special competences and skills in engineering, procurement, construction and installation.



Engineers and service technicians have the work and safety training, courses and certificates required to work with service and maintenance assignments offshore.

'All our engineers and service technicians have the work and safety training, courses and certificates required to work with service and maintenance assignments offshore. They all have practical working experience from the construction phase of an offshore substation and most of them are multi-disciplined meaning that a small team can perform a wide range of service and maintenance tasks,' continues Bjarne Christensen.

### Focus on operation

Many offshore wind farm operators have engaged with several companies providing service and maintenance. Consequently the wind farm operators must do all the planning and coordination themselves. Apart from being very time consuming, this approach also demands more frequent visits to the substation and the wind power generators. By engaging with only one service provider, for whom service and maintenance is core business, the operator can focus his resources on operating the wind farm.

The O&M Manager on the Nordsee One wind farm, Sönke Scholl has made a long term service and maintenance agreement with Semco Maritime. He says: 'They built the substation – it makes perfect sense that they service and maintain it. By letting one service provider take care of all service and maintenance aspects we save both time and money. This enables us to concentrate on what we do best: Providing reliable wind power at the lowest possible cost'.

### Computer aided maintenance schedules

All service and maintenance jobs start with a thorough general survey of the asset, in order to assess the technical condition, of the offshore substation and transition pieces. Based on this survey a customised service and maintenance schedule is developed. This schedule ensures that all systems are serviced according to manuals and requirements.

A specialist service and maintenance provider will allocate the proper resources and personnel with the right competences for the job. The use of multi-disciplined engineers and technicians ensures efficiency and high quality service and maintenance work.

The maintenance schedule is made in a computer-based maintenance management system that makes all service and maintenance tasks performed visible for the operator.

Maintenance reports are generated daily, weekly or monthly documenting every single service task. The reports provide a record of what was serviced, how long it took and who did the job, as well safety and technical protocols. The schedule is updated and changed regularly according



- Proof of inspectors presence
- Real-time data
- Push tasks from ERP System
- Immediate overview of status onboard

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### Semco Maritime

Semco Maritime is an international project engineering company with more than 30 years of experience dedicated to the global energy sector. Based on the company's vision: 'To be the energy sector's first choice for safe solutions that consistently meet expectations', they facilitate the design, fabrication, service and maintenance of the customers' assets, providing comprehensive project management across all phases of energy projects.

From turnkey engineering solutions to operation support and delivery of components, systems and solutions Semco Maritime makes sure that customers and partners in the energy

sector experience safe and cost-efficient operations.

Starting in the oil and gas industry in the early 80s, today Semco Maritime is the global market leader in offshore substation solutions. Since 2001 the company has designed and delivered all necessary electrical equipment for 19 substations including high, medium and low voltage switchgear, SCADA systems and telecommunication solutions.

Semco Maritime is a truly global company with 1300 employees in the headquarters in Denmark and in the subsidiaries in Norway, the UK, Singapore, Vietnam, China, Australia, Central America and the USA.

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to the service requirements.

For Semco Maritime safety always comes first. The company's safety motto is 'No compromise – we care'.

'We are very proud of our fine safety records. We put great effort in training our staff in safety. We want our people to return home in the evening as safe and sound as when they left for work in the morning,' explains Bjarne Christensen.

Monitoring the control station of the substation and the wind power generators and hotline service support are also managed by the service provider. This

ensures efficient operation of all systems and quick reaction in case of emergency.

'We have established a subsidiary in Norddeich, Germany in order to be close to our customers operating in the Southern part of the North Sea. We are planning to establish more service hubs on strategic locations, to make sure that we can service offshore wind farm operators in the best possible way. We strongly believe that this kind of cooperation will increase in the future,' concludes Bjarne Christensen.

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