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WIND OF CHANGE – IS NEC THE FUTURE FOR WIND PROJECTS IN APEC?

Jul 30, 2020

SUMMARY

COVID-19 is causing uncertainty for business and investment strategies worldwide, the energy sector included. Despite this, investors are increasingly looking to renewables as a way to meet growing energy demand while decarbonising energy supply. While countries across Asia-Pacific have shown strong appetite for wind power, the risk of natural disasters, inadequate government support and the high costs of new technologies (both financially and in human resource requirements) mean they won't all reach their potential.

There are clear risks to undertaking wind projects, particularly as the average size of each project increases in scale. For offshore wind projects in particular, projects are pushing boundaries by going further from shore, into deeper waters and contending with more severe marine conditions. Turbines are growing ever larger, such as Siemens-Gamesa's 14MW giant, which will be deployed on Taiwan's Hai Long project in 2024, and require installation vessels that are in short supply but needed in time limited construction windows. Yet the ambitious Asia-Pacific excluding China (APeC) market targets a combined 54GW in offshore wind projects by 2030, according to Asia Wind Energy Association forecasts in May 2020. It is clear then that in the wind sector, opportunities and risks are increasing hand-in-hand.

There is no set standard form contract for wind projects. Single contractors are often unwilling to accept full EPC risk for completed projects, although there are a limited number of contractors in a very busy market who are prepared to do so. A turnkey solution is very rare for an entire offshore wind farm, so multi-contracting approaches are often adopted, with a range in the number of contract packages.

The types of contract used often depend on what the developer or key technology providers are familiar with. In Asia-Pacific, FIDIC, LOGIC or bespoke contracts are often used for wind projects. Recently, however, there have been reports of an uptick in the use of NEC, heralding a departure from the "traditional" approach.

This blog post considers why this might be and what barriers may remain to widespread adoption of NEC in this sector.

Move towards NEC

The NEC contract is not a new concept, but it has been used infrequently in the wind sector since its first edition was published in 1993, when it was considered radically different from the alternatives.

In the past decade, the NEC suite has been endorsed across Asia-Pacific, from New Zealand and Australia to Hong Kong SAR. One of the regional flagbearers for the NEC contract's use has been New Zealand's state-backed electricity generator, Meridian Energy, which has used NEC contracts for large and complex projects, including two wind farms. Mill Creek wind farm (US$26 million) near Wellington in New Zealand, was completed in 2014 (26 turbines, 60MW). Mt Mercer, a 64-turbine, 131MW wind farm (US$175 million) in Victoria, was the first NEC project in Australia, completing on time and budget at the end of 2014. Hong Kong SAR's NEC case studies include use by major utility CLP, the electricity supplier to over 80% of Hong Kong SAR's population. The ever growing interest in NEC contracts throughout the Asia-Pacific region is down to the NEC's unique characteristics, which are well documented.

The NEC contract suite:

- Emphasises collaboration and requires a different mind-set to the adversarial approach in traditional contracts. This goes further than the incentive mechanisms such as KPIs or pain/gain share in traditional contracts.
- Focuses the parties' attentions on project outcomes, rather than restrictions imposed by the contract's wording.
- Is to be used as a project management tool, focusing on programme obligations and pro-active risk management, with early warning systems and swift resolution of employer risk events with time and/or cost impacts.
- Clearly defines contract roles and the allocation of responsibilities.
- Uses the present tense, plain language and avoids "legalese", which often appeals to non-lawyers and those using the contract day-to-day. It also lends itself to easy translation for international projects.

Against a backdrop of growing demand for wind projects amidst severe market upheaval, wind project developers may see advantages in using a contract designed for collaborative risk management compared with other contracting models. This type of contract, with procedures that facilitate good practice is even more fitting in uncertain times.

The NEC's increasing international usage was recognised in new dispute avoidance provisions with the launch of NEC4 in 2017, with drafting for the formation of a dispute avoidance board as an alternative to adjudication where the Construction Act 1996 does not apply. The introduction of a dispute avoidance board clearly has international users of NEC in mind and is in line with FIDIC's approach, which many counterparties on Asia-Pacific wind projects are more familiar with.

Barriers to use of NEC?

However, notwithstanding the benefits of NEC's contract models, and the increased use of NEC contracts in certain jurisdictions, there remain some barriers to its more widespread application in the renewables sector generally.

Developing and financing renewable energy projects can be complex. Offshore wind projects in particular involve a number of contracting packages and are among some of the most capital-intensive energy transactions being deployed in the global market. Given their capital requirements the vast majority of such projects in the APeC region are or will be leveraged with limited or non-recourse debt from banks or institutional investors and sponsored by some of the largest utilities and other energy companies in the world. These parties make funding and equity available during a project's riskiest phase – and are very reliant on a project being fully constructed and commercially successful for the return of their capital.

Many of these financiers and sponsors have been involved in offshore wind or other energy procurement programmes in Europe and the Middle East and have experience of some of the more prevalent contract forms in use in the energy sector, including for example, the 1999 FIDIC suite. They are comfortable with the approach to risk allocation these models take.

In contrast to NEC's focus on collaboration, these other models emphasise clear delineation of risk, liabilities and responsibilities. They also offer a high degree of price certainty, in contrast with NEC's change management provisions and detailed programming requirements. Although the interactive process envisioned by NEC may sometimes result in a lower construction cost, in offshore wind deals where funders and sponsors are principally concerned with getting a project over the line and protecting their return on investment, price certainty is often more critical.

One other drawback of NEC versus the other contract forms is that it has traditionally failed to offer a design build operate (DBO) solution, which can be desirable in certain projects. This has largely been rectified with the introduction of the NEC4 DBO contract which allows clients to procure a more integrated whole-life delivery solution. However, it is not clear whether this innovation will have much impact on the application of NEC models in off or onshore wind projects. Given the disproportionate capital value of turbines for these projects, and in the case of offshore wind the number and relative size of complex onshore and offshore electrical infrastructure packages, as mentioned earlier, these projects have typically been developed and financed using a multi-contracting structure.

Final thoughts

Widespread adoption of NEC on wind projects could be likened to the chicken and egg scenario. As highlighted earlier, arguably the key factor in determining widespread adoption is buy-in from funders and sponsors. But to buy-in, these parties need to have confidence that this contracting model works in the wind sector and, arguably, not only works but works better than the traditional models that projects have relied on, so that funders and sponsors have confidence to depart from tried and trusted approaches. The only way to tell if this is the case is for NEC to be used on more wind projects. Government sanctioned use of NEC will undoubtedly go some way towards addressing this issue, but in the interim, we are left with the conclusion that only time will tell as to whether NEC will be the future for wind projects in APeC.

This article first appeared on the Practical Law Construction blog dated 29 July 2020.

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