Renewables projects: Structuring your construction contracts

By Laura Riddeck

Takeaways

- Interface issues between packages are critical – but an EPC solution is not always feasible
- Onshore/offshore splits can further complicate matters
- Success or failure of a project can be determined by how contracts dovetail

Governments around the world are increasingly investing in renewable energy projects as part of their strategic transition to clean energies. In this article, we take a look at some key considerations for structuring the construction contracts for such projects.

Package interfaces

Renewable energy projects typically involve a number of discrete key packages of work. In an onshore wind project, for example, the owner will procure the wind turbine generators and the balance of plant, comprising foundations, site roads, crane pads, and other infrastructure, as well as electrical connections to the grid, substations, and transformers. For offshore wind projects, the owner will additionally procure vessels and harbor facilities. On a solar project, multiple vendors may be appointed to supply key equipment with other contractors responsible for installation and interconnections. Where battery storage is required, the battery units will also be sourced.

Traditionally, due to the high values of proprietary vendor packages, these contracts have been independently procured, with the owner appointing each contractor separately and taking responsibility for the management of any interface between those contracts. Increasingly (particularly in relation to onshore wind and solar projects), owners are looking to appoint one contractor on an engineering, procurement, and construction (EPC) or "turnkey" basis.

EPC contracting is a long-established procurement route on many projects, including power generation. The advantage for the owner is that a single contractor takes on full responsibility for the management of all packages, including any interfaces.

Key interfaces on renewables projects often arise in relation to design and programming. On a wind project, for example, the turbine manufacturer's load calculations need to feed into the foundation contractor's civil engineering design so that the foundations can support the wind turbines within the environmental conditions at the site.

In addition to the management of the process, in the event of problems resulting from design errors, the structuring of the contracts may have implications for liability. With split contracts, any claim goes through the owner. One contractor would not claim against another, but instead would bring a claim against the owner, who then passes that claim on to another contractor. The owner therefore takes the insolvency risk for any package contractor, and any claims by one contractor that exceed the limit of liability of the other will fall to the owner. Liability is typically limited by reference to a percentage of the contract price, meaning that protection for any individual problem would be much lower in this scenario than under an EPC contract.

Management of delay is also critical. Delays in installation of one package can cause consequential delays in other packages. The owner would be smart to avoid being caught in the middle. Under an EPC contract, culpable delay by one of the package (sub)contractors would not entitle the EPC contractor to an extension of time. But with multiple packages, the owner would not be able to recover project-wide liquidated damages. Instead, the owner would claim delay damages from the delaying contractor and then would have to grant extensions of time (and, typically, cost) to the other contractors impacted.

A contractor's liability for delay will usually be liquidated. Delay damages need to cover the owner's own losses as well as any costs the owner incurs to other package contractors – but it is extremely difficult for an owner to price liquidated damages beyond its own losses. Delay damages would also usually be subject to sub-caps on liability, which derive from the applicable contract sum. Smaller packages will therefore have lower limits on liability, but may still have a significant impact.

A further complication is that these delays may not be linear – a one-week delay by a foundations contractor could turn into three weeks of delay for the turbine supplier as well as to the overall project. One week's delay damages may therefore be inadequate compensation for the owner in this regard.

It is easy to see why an EPC solution is attractive to an owner: one contractor delivers the whole project with responsibility for the interface issues as well as committing to project-wide completion deadlines and liability caps, giving the owner the potential ability to reject the entire project – including completed packages – if the solution ultimately does not work as warranted.

In some renewables projects, such as solar, EPC contracting is not uncommon. In the wind industry, it is seen much less frequently because of the large volume of proprietary equipment involved. Increasingly, owners are requesting an EPC structure for onshore wind projects. If any party takes the EPC risk, it would be the wind turbine manufacturer – the turbines, after all, are the highest package by value. Another contractor would likely add limited value beyond the contractual acceptance of risk.

But EPC risk – a big change in the traditional risk profile – is frequently unpalatable to turbine manufacturers. The owner is often seen as the best party to manage the interface risk. The owner is also the party who chose the site, has the best local knowledge, and is likely to be the best party to choose the contractors for the balance of plant (BoP). The manufacturer of the wind turbines generator, by contrast, is not a specialist EPC contractor with a regular BoP supply chain.

In an offshore setup, EPC solutions are even less likely to take off. There, the vessel packages add a further challenge (with vessel providers likely to offer limited flexibility in contracting terms), and the substation, foundations, and cabling packages are more complex.

Ultimately, the owner may be best placed to assume and manage the risk of multiple contracts. It may be a more cost-effective solution: any transfer of EPC risk would come with a premium. Split contracts can also be an advantage in terms of control and timing: you do not need to wait until everything is agreed upon before you can award some of the contracts.

Onshore and offshore splits

For tax purposes or to fulfill local requirements, another increasingly common issue for parties to work through when structuring these projects is a split in scope between onshore and offshore work. Onshore scope here means those elements of the scope that are to be performed within the project country (installation and commissioning, for example), whereas the offshore scope captures supply and manufacture outside of the country.

This issue is not unique to the renewables industry, but it is relevant given that such projects often involve a substantial part of the contract price representing payments for manufactured goods (such as wind turbine components, electrical equipment for transformers and substations, or modules and inverters) that need to be imported.

The driver here is usually tax, with the contractor seeking to avoid incurring local taxation on its offshore receipts when goods are being imported from outside the nation in which the project is being constructed. It arises most commonly in an EPC context, where the scope involves equipment supply plus on-site works and installation.

The result is that one contract is split into two, with the detail of the split often varying from jurisdiction to jurisdiction. Typically, the contractors will be the same entity or related entities.

The overarching aim here is that through the split contract, the parties should be in no worse (and no better) position than they would have been under a single contract. The devil is in the details, of course, and numerous complexities can be created (especially where the particular rules in the relevant jurisdiction mean that the contracts may not refer to each other). Common issues to work through include: dilution of liability limits defined by reference to contract prices (or, from the contractor's perspective, concerns over "double-dipping" with multiple contracts); how delay liquidated damages can compensate for the delay of the whole project; and interfaces and problems falling through the gaps.

These concerns are often addressed by an umbrella agreement, or "EPC wrap," a tri-partite agreement expressly dealing with such interface issues.

There is no "one-size-fits-all" solution since the requirements can vary considerably from jurisdiction to jurisdiction. We would always recommend obtaining specialist advice to ensure that an effective resolution is reached.

Final word

Multiple contracts are common in renewable energy projects – whether the project is divided by packages or into offshore and onshore split contracts. Where you have multiple contracts, how those contracts dovetail and respond in the event of project delay or external complications can be a major factor in the success or failure of the project.

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Laura advises on construction and engineering projects within the Projects and Construction group at Reed Smith in London. Laura is recognized as a Rising Star by the London Super Lawyers List for Construction and Civil Engineering and is described by Legal 500 UK 2019 as "excellent" and is noted for being "very proactive in terms of offering solutions in a very practical way." Her experience encompasses a variety of energy and infrastructure projects with a particular focus on renewable energy developments. She is experienced in drafting and negotiating contracts based on FIDIC, NEC and other standard construction contracts, as well as bespoke EPC and other contracts, and focuses on providing commercial and effective solutions for clients.