

## CHINESE EPC CONTRACTS – A LEGAL PERSPECTIVE

IN RECENT YEARS, THE GLOBAL POWER SECTOR HAS EXPERIENCED A MARKED INCREASE IN PARTICIPATION BY CHINA'S ENGINEERING, PROCUREMENT AND CONSTRUCTION FIRMS. BY **THOMAS B TRIMBLE**, PARTNER, AND **M ADIL QURESHI**, ASSOCIATE, IN THE WASHINGTON OFFICE OF **AKIN GUMP**.

Emerging markets in particular have seen a wave of EPC contractors landing significant government-sponsored projects and projects put out for public tender. A market once dominated by US and European contractors is now seeing strong competition by Chinese firms, whose presence in high-profile projects has become increasingly common.

As state-controlled companies, China's international EPC firms share in common a unique degree of government support enabling them to gain market share by offering sponsors low prices and access to cheap financing. The price and financing advantages presented by such firms, however, may come with additional risk for the owners and offtakers of such power projects.

Where Chinese firms have gained market share – particularly in Africa and Asia – some of their projects have experienced significant cost overruns and under-performance in the form of delays, changes in project scope, and diminished generating capacity, all of which can negatively impact a project's future cashflows and long-term viability. While liquidated damages can compensate for some aspects of under-performance, they cannot fully make up for a decade or more of lost profits on an impaired asset.

A carefully planned and executed legal approach is crucial toward mitigating these risks, and to ensuring commercial viability and safe construction and operation of projects executed by EPC firms with an under-developed track record. Chinese EPC contractors have an important role to play in opening markets and growing the global power sector. Given the volume of transactions currently under way, it can be expected that the performance of these firms will improve over time. But at present and for the near future, sponsors executing projects in the power sector – and investors in such projects – must be attuned to the potential risks arising from contracts with new and unproven market entrants in the EPC space.

### **Cost and financing advantages**

The appeal of Chinese EPC contractors to global project owners is rooted in cost and financing advantages derived from the active involvement of the government in the country's power and

infrastructure sectors. Chinese EPC contractors have been among the direct beneficiaries of what some experts have referred to as “the great build-out of China” – the ongoing state-directed investment of tremendous resources in the country's infrastructure. This investment has enabled Chinese companies to gain experience and capacity domestically and to benefit from technology transfer by foreign infrastructure firms working in the country.

As these EPC firms established position in their home market, the government promoted their entry into the global marketplace – a policy referred to as “zou chuqu” or “go global” – by providing access to low-cost export and project financing and guarantees. As recently as April 2012, the government announced the creation of a US\$10bn line of credit for the financing of energy and infrastructure projects in Central and Eastern Europe. The cost and financing advantages created by government support for these EPC firms have succeeded in stoking demand for their services among project sponsors internationally.

• *Price advantage* – The highly competitive commercial terms offered by Chinese EPC firms are made possible, in part, by the scale achieved by the Chinese power sector in recent years, which has enabled the production and procurement of power equipment in volumes large enough to provide a clear pricing advantage. Demand for equipment made by such companies as Harbin Power Equipment and Shanghai Electric Group has been on the upswing in emerging markets. In November 2011, India's Business Standard reported that about 7,000MW of generating capacity in India was currently supplied by Chinese-manufactured power equipment and that purchasers in the country had ordered an estimated 40,000MW more.

Chinese EPC firms also benefit from relatively low-cost Chinese labour, allowing such firms to drive costs down further. According to a report in Botswana's Mmegi, an English-language daily, “[a] survey of 35 Chinese construction companies throughout Africa shows that 91% of the Chinese companies management personnel came from China, 8% were local Africans and 1% from a third country. The same survey also reveals that Chinese managers in Ethiopia are paid US\$700 per month

... whereas American managers working in Africa are paid over US\$10,000 per month.”

The pricing advantage arising from low-cost equipment and labour is amplified further by the apparent willingness of Chinese contractors to sacrifice profit margin for market share. One industry report indicates that Chinese EPC firms are willing to accept margins as low as 5% – much lower than their international competitors.

The competitive price of Chinese construction has fuelled the global expansion of Chinese EPC firms. In May 2010, Dongfang Electric Corporation contracted to build a 300MW coal-fired facility in Bosnia for about half the price offered by the competition. In some cases, low bids from Chinese EPC firms are said to have deterred competition from international contractors. A recent report on a number of Chinese-built plants in Vietnam – six plants totaling 1,380MW in all – indicated that the practice of awarding contracts to the lowest bidder had kept international firms from submitting competing proposals.

• *Access to financing* – Thanks to a co-ordinated effort by the Chinese government to promote China’s infrastructure companies abroad, Chinese contractors can procure or facilitate financing from state-controlled lenders on favourable – and in some cases concessional – terms. In a lending environment where international lenders are closely scrutinising risk, such debt arrangements are highly attractive to emerging market project sponsors.

Export and project financing from sources such as the Export-Import Bank of China and the China Development Bank are central to China-sourced debt packages. Also crucial is insurance against non-payment from the China Export & Credit Insurance Corporation (Sinosure). In fact, Chinese commercial banks will often require a Sinosure guarantee as a pre-requisite to project financing. Sinosure, in turn, requires that Chinese-origin goods or services make up a minimum portion of the covered contract amount.

A prime example of the role of Chinese capital in opening markets to Chinese firms is the Salalah IWPP – a US\$1bn 400MW independent water and power project in Oman. Due in large part to the availability of Chinese financing, the project was awarded to a consortium including the Shandong No 3 Electric Power Construction Corporation (SEPCO III), making it the first Chinese EPC firm to win a power construction bid in the Gulf region. The project was financed by the Bank of China and the China Development Bank with cover from Sinosure for nearly half of the project debt.

#### **EPC contractor risk – Caveat emptor**

Let the buyer beware – the lure of low-cost construction and access to cheap financing are not without considerable risks. In recent years many projects under construction by some state-controlled EPC market entrants have suffered from performance failures, contractual issues, and enforcement difficulties, all of which have resulted in higher costs over the long run.

• *Performance risk* – The most significant risk at play with a less experienced contractor is that the contractor’s performance may not meet the requirements or standards set out in the EPC contract. There have been numerous accounts in recent years of cost over-runs as high as 40%–50% of project costs, delays, quality issues, and equipment failures resulting from apparent under-performance of these market entrants. In Indonesia, Chinese firms were involved in nine out of the 10 power projects in the country’s first power development plan, known as the “fast track power programme”. In April this year, the Jakarta Post reported delays on several of the “fast track” plants due to a series of quality and equipment issues attributed to the contractors, including condenser and transformer explosions.

In August 2011, a Chinese-constructed gas-fired plant intended to generate 335MW in Nigeria was reported to max out at 80MW, with only two of eight gas turbines in working order. Plant managers cited difficulties in getting spare parts from the contractor. In Pakistan, the 969MW Neelum-Jhelum hydropower project has reportedly experienced 50% cost over-runs and a two-year delay. Similar accounts have been reported recently from India, Sri Lanka, Bangladesh, Vietnam, and East Timor.

Recent failures such as these suggest a potential pattern of inadequate planning on the part of the contractor, low-quality equipment, and a departure from international construction quality standards. Some commentators have gone as far as to tie quality and performance issues to systematic underbidding by these EPC firms. Unrealistically low bids result in extreme cost-cutting measures, undermine the quality of the end-product and increase the chances that the contract will ultimately have to be renegotiated.

• *EPC contract risk* – Contractual shortcomings have had an impact as well. The ready availability of state-backed financing has weakened lender due diligence standards, introducing the likelihood that EPC contracts will fail to protect sponsors against under-performance and other project risks.

Typically, rigorous lending standards force a careful allocation of risk by project sponsors. Sponsors seek to allocate as much performance risk as possible to the EPC contractor such that only those risks best mitigated by the sponsor remain. Remaining risk, such as that of a force majeure event or change in law, can be addressed by sovereign guarantees and/or insurance.

Some government-backed lenders, however, require less security from EPC contractors, instead looking toward sovereign or corporate guarantees for protection against project risk. This lack of rigorous lender scrutiny raises the probability that EPC contracts will not provide the level of specificity necessary to ensure successful execution of the project or provide requisite security in the event of under-performance. Additionally, regulatory issues that would typically be highlighted under close review

may evade consideration, introducing regulatory risk that can seriously impair the execution and profitability of the project.

- *Enforcement risk* – Where a sponsor is able to negotiate a market EPC contract – including arbitration under the rules of a neutral, internationally recognised arbitral forum – it may not be able to enforce the contractor's obligations without first securing a judgement in a jurisdiction where the contractor maintains assets. In the case of state-controlled Chinese EPC firms, a principal jurisdiction for enforcement is China.

As a signatory to the New York Convention on the Recognition and Enforcement of International Arbitration Awards (New York Convention), China has put in place a legal regime for recognising foreign arbitral awards made in member state jurisdictions. In practice, however, the process of enforcing such awards in Chinese courts can be time-consuming, procedurally cumbersome, expensive, uncertain, and subject to a range of local and political influences. One key point of uncertainty is an allowance in the New York Convention that permits member states to refrain from enforcing awards that contravene “public policy” – a vague term that has proven susceptible to protectionist interpretation.

Arbitral awards issued in China do not fare much better. Those issued under the rules of foreign arbitral bodies exist in a legal grey area, in which they may be treated variously as “foreign awards” or “foreign-related” awards – a meaningful legal distinction under Chinese law. Chinese courts have, in some cases, treated these awards as foreign awards under the New York Convention, but the question is far from settled. Awards relating to foreign projects issued by domestic arbitral bodies, such as the increasingly sophisticated China International Economic and Trade Arbitration Commission (CIETAC), are considered to be “foreign-related” and may be set aside for any number of reasons connected to the “public interest”.

### Mitigation measures

Given these risks, sponsors should craft and adhere to a focused risk mitigation strategy when soliciting and evaluating bids from less-experienced state-controlled EPC contractors. Carefully negotiated and drafted contract documentation will be a central pillar of any such strategy. Specifically, sponsors should negotiate for and include the following terms in the EPC contract:

- *Clearly set out performance and testing standards*: Clear and detailed performance standards against which the operation of the facility will be judged and the testing processes to be used for evaluating performance. Additionally, equipment standards should be made explicit, and a compliance verification process should be put in place to ensure the quality of all equipment and parts.

- *Proactive rights of owners*: Provisions that give the project owner more “proactive” rights during the construction and commissioning phases than would ordinarily be seen in a standard EPC contract.

- *Comprehensive construction guarantees*:

Performance bonds to be held by banks in jurisdictions outside the state-controlled contractor's country of origin covering duration, cost, and performance specifications. The EPC contractor should bear those risks that the contractor can most effectively mitigate, including those relating to construction issues.

- *Warranties of adequate scope and duration*: Warranties on major parts, re-performance periods, and structural soundness of the maximum reasonable duration. The EPC contractor should be required to secure warranties of adequate scope and duration from all subcontractors and equipment suppliers, and must be required to enforce any and all of those warranties, should the need arise.

- *Limitation of liability provisions closely calibrated to risk*: Limitation of liability provisions that push back on traditional liability caps for contract breaches and breaches of warranties. Additional scrutiny should also be given to those subjects that are ordinarily outside the cap (eg, gross negligence and wilful misconduct), recognising that these legal concepts are not applied uniformly across jurisdictions.

- *Indemnification for full range of possible damages*: Indemnification of the sponsor for any damages or expenses incurred in connection with any failure of – or any accidents relating to – the facility, or any related equipment procured, installed, or used by the EPC contractor.

- *Co-operation and communication with owner's engineer*: Co-operation between the EPC firm and the owner's engineer in accordance with clearly set out processes and procedures. To avoid confusion or delay in communications, the parties should select a mutually agreed-upon language for all official communications or notifications, as well as all documents and operations manuals.

- *Detailed maintenance obligations*: Maintenance of the facility by the EPC contractor over an extended period in accordance with clear maintenance standards. Further, the EPC contractor should be required to co-operate with the operators of the facility to ensure the smooth functioning of the plant and prompt repair of any damages.

- *Adequate supply of and continued access to spare parts*: A lengthy period for supply of spare parts. The EPC contractor should also guarantee access to these spare parts at a specified price.

- *Arbitration and dispute resolution*: Arbitration under the rules of a mutually agreed-upon, internationally recognised arbitral body in a neutral jurisdiction outside of the contractor's country of origin. The sponsor must plan in advance for the uncertainties of enforcement of arbitral awards.

While these terms will not eliminate contractor-related risks, they will contain and alleviate the most common dangers connected to less experienced state-controlled EPC firms and can prove decisive in protecting sponsors against negative outcomes.