Gebze IPP

# Gebze goes merchant

Unit Investment NV and Ansaldo Energia SpA have reached financial close on the landmark Gebze CCGT power project. By **Jason Kerr**, **Dr Zeynep Cakmak**, **Carina Radford** and **Paul Simpson** of **White & Case's** energy, infrastructure and project finance team.

On July 12 2011, the financing of the 865MW gas-fired combined cycle power plant in Kocaeli, Gebze, located near Istanbul in the Republic of Turkey, reached financial close. The Gebze CCGT project is of landmark significance in that it represents the successful conclusion of a limited recourse project financing of a gas-fired merchant power plant, in a jurisdiction where the on-going liberalisation of the electricity and gas markets required forward-thinking engagement and collaboration between sponsors and lenders.

The core challenge presented by the Gebze CCGT project was the need to balance the desire of the sponsors to steer their business as effectively as possible through the evolving Turkish electricity and gas markets, with the risk-management expectations of project finance lenders.

While the project financing of a gas-fired merchant power plant in and of itself provoked the need for the parties to take a view on the likely development of the Turkish electricity market and the appropriate conditions for regulation of sales risk throughout the tenor of the financing (in particular in light of pricing differentials between renewable energy plants and gas-fired plants, and future expectations in relation to nuclear energy entrants into the Turkish electricity market), additional considerations also arose when this was coupled with the sponsors' wish to retain flexibility to maximise the potential opportunities that the developing gas supply market in Turkey also presented.

Over and above these operational discussion points, the lenders were also asked to accept a limited recourse position during construction given the strength of the EPC contractor and robust EPC contractual framework, which represented a move away from the more traditional full completion guarantee-driven approach to construction in the Turkish market.

Each of these topics – the approach to the continuing development of the Turkish electricity market and the liberalisation of the Turkish gas market and construction risk – needed to be discussed and developed within the terms of the Gebze CCGT project financing and the successful close of the project demonstrates the confidence invested by sponsors and lenders alike in the future of the Turkish power sector and the fact that the Turkish project finance market itself is evolving at the same time.

## The Gebze CCGT project

The Gebze CCGT project involved the design, procurement, construction and operation of an 865MW natural gas-fired combined cycle power plant within the Kocaeli-Gebze VIth (IMES) Organised Industrial Zone near Istanbul, Turkey. In 2008, the project company, Yeni Elektrik Üretim AŞ (Yeni), was granted a generation licence for 49 years.

The project benefits from strong sponsor credentials: - Unit Investment NV (Unit) has an established presence in the Turkish market, with more than 30 years' experience in the Turkish power sector, and its joint venture partner in the project, Ansaldo Energia SpA (Ansaldo), is Italy's leading producer of thermoelectric power plants, bringing a proven track record in the construction of CCGT plants. Unit and Ansaldo are shareholders in Yeni, with Unit owning 60% of the shares and Ansaldo the remaining 40%.

Yeni entered into a lump-sum turnkey EPC contract with Ansaldo, with support for Ansaldo's performance obligations under the EPC contract being provided by its majority shareholder, Finmeccanica SpA (Finmeccanica), the Italian industrial conglomerate with global operations. Construction is currently under way and provisional acceptance is scheduled for December 2013. Finmeccanica's commitment to the project was seen not only with respect to the EPC performance security package, but also

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by the fact that it was at the table with Unit and Ansaldo throughout the financing negotiations and provided additional support to the lenders with respect to certain of Ansaldo's sponsor obligations.

The project was financed exclusively in the Turkish bank market. Türkiye Garanti Bankasi AŞ, Türkiye Iş Bankasi AŞ, T Vakiflar Bankasi TAO and Yapi ve Kredi Bankasi AŞ together provided a US$700m term loan facility and a US$80m letter of guarantee facility to Yeni with project costs estimated at around US$1bn on a debt to equity basis of 70:30. The term loan facility has a 14-year door-to-door tenor.

## Liberalisation of the Turkish electricity market

As noted above, one of the upfront considerations in approaching the project financing of the Gebze CCGT plant for the sponsors and lenders was determining the appropriate terms and conditions to implement with respect to managing the merchant sales risk of the plant. In this respect, an understanding of the history of the development of the Turkish power sector is important in order to provide context to the discussions.

Until the early 1980s, when the liberalisation of the power sector in Turkey began in earnest, the sector had been dominated by TEK (Turkish Electricity Authority), which was established in 1970, as a state monopoly, to generate, transmit, distribute and trade electrical energy. In 1984, the first private power law No. 3096 (commonly referred to as the build-operate-transfer Law (the BOT Law)) was enacted, paving the way for the opening-up of the market to private sector players.

Later, in 1996, the government created the build-operate (BO) model with a Council of Ministers Decree and later with Law No. 4283, which was enacted in 1997 (commonly referred to as the Build-Operate Law (the BO Law)), which removed certain obstacles at the judicial level, thereby allowing the successful implementation of five BO power plants. As a result of these legislative developments, a number of different models for the development of generation assets (including the BOT, BO and transfer of operation rights models) have been successfully implemented in Turkey and the volume of new-build assets in the market stands testament to this progress.

In 2001, as a result of deliberation with the International Monetary Fund and the World Bank and in an effort to harmonise the regulatory framework with EU legislation, the Electricity Market Law No. 4628 (the EML) was enacted to further liberalise the Turkish power sector.

The EML introduced a new competitive market structure by increasing the role of private sector investors in the electricity market, reducing the public sector share in investments and minimising the availability of guarantees previously provided by the treasury under the BOT Law and the BO Law. The EML also gave rise to the creation of an autonomous regulatory body, the Energy Market Regulatory Authority (EMRA), and created three public bodies: EÜAŞ (for generation), TEIAŞ (for transmission) and TETAŞ (for wholesale and trading).

The EML set out principles to apply during a "transition period" for the market (from January 2005 to December 2012) so as to seek to achieve a smooth transition to a fully liberalised system over time. One of the key principles of the transition period was that distribution companies would be obliged to purchase approximately 85% of their electricity from TETAŞ and EÜAŞ with only approximately 15% to be met through the market.

National tariffs were also set throughout the transition period based on the purpose of the usage (eg, household, commercial, etc) and criteria were set for "eligible" or "non-eligible" consumers, where generation and retail sale companies could not sell direct to non-eligible consumers. The underlying objectives of the principles applying in the transition period were to allow the incremental introduction of day-ahead and balancing markets where prices could be freely set.

While new entry into the market by private sector entities has been increasing year-on-year since the start of the liberalisation process, the privatisation of the EÜAŞ-owned generation assets has been impeded by a series of delays over the last decade but is now currently under way with the privatisation tender issued for the Hamitabat plant in March 2011. More than 16,000MW of EÜAŞ generating capacity will most likely be split among nine different portfolios and sold to private investors, which will be a significant step in the full liberalisation of the market.

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## Merchant power

As with any merchant project, it was necessary for the sponsors and the lenders to take a view on sales risk – both in terms of volume and price – in order to determine whether the risk could be managed and, if so, how. This is particularly challenging, however, in an electricity market that is fast-developing and where different views prevail as to the likely future position of gas-fired projects within the market.

Notably, in January 2011, a new law was passed (Law No. 6094) providing for increased incentives for renewable energy plants including feed-in tariffs, which are coupled with the Turkish government's vocal support for development of nuclear energy. Both renewable energy and nuclear plants would typically have priority access to the market compared with a CCGT plant.

It is worth noting, however, that the Gebze CCGT plant is located in a region where demand for electricity is growing at a rate that is 40% higher than national demand, providing the plant with a potential advantage in that during periods of low national demand compared with aggregate national generation capacity, when

The Gebze CCGT is **located in a region** where demand is **growing at 40%**

the project may not be scheduled to generate given other priority plants, it may still be asked to do so given the needs of the immediate region. In addition, the projected efficiency of the plant is intended to present opportunities for higher margins on the prevailing spot prices.

**Agreed sales strategy**

The key issue remained, however, that both the sponsors and the lenders had to conceive a suitable set of terms and conditions for Yeni's sales strategy that would provide sufficient flexibility to allow for future changes in the market but that would also provide a bankable platform on which the lenders could finance the project today. On this basis, an "Agreed Sales Strategy" was developed.

The sponsors argued strongly for as much flexibility as possible in determining the plant's sales strategy without undue controls or limitations imposed by the lenders. The sponsors' position was that the default market for the plant would be the day-ahead market with the geographic location of the plant allowing it to achieve better margins at the spot price than other producers and its design allowing it to operate at "heavy cycling mode" to maximise its profits.

However, the lenders were keen to establish additional guideline principles and a methodology for developing Yeni's sales strategy going forward. As such, a set of guideline principles was crafted and a methodology established for ongoing consultation between Yeni and the lenders as to market practice and conditions, which achieved the goal of flexibility, both from a management and market perspective, and certainty from a lender perspective, in terms of pre-determined conditions that would be triggered when the market moved in a certain direction.

**Liberalisation of the Turkish gas market**

The sponsors were also keen to capitalise on the growing diversification of gas supply sources within the Turkish gas market in order to maximise competitive terms for the plant's gas supply arrangements. Unlike the Turkish electricity market, far less progress had been made in the liberalisation of the Turkish gas market and, therefore, there was even less visibility as to the likely development of the market over the term of the financing.

Prior to the enactment in 2001 of the Natural Gas Market Law No. 4646 (the NGML), Turkey's natural gas market was entirely controlled by state-owned company BOTAŞ. Although the monopoly rights of BOTAŞ (other than its legal monopoly in national grid transmission activities) were abolished by the NGML, BOTAŞ still retains a 90%share of the wholesale market. Pursuant to the NGML, BOTAŞ is required to reduce its total imports to 20% of annual national consumption, thereby creating competition within the Turkish gas market and an unbundling of BOTAŞ into different legal entities (and privatised entities) was required to take place (other than with respect to its transmission activities).

Since the NGML, there have been various private sector companies that have been awarded an import licence and up to 4bcm, equalling 9% of the BOTAŞ contracts, has been transferred to the private sector.

Given the monopoly position of BOTAŞ in the Turkish gas market, short-term gas supply arrangements with BOTAŞ were not generally a concern from a bankability perspective as the likelihood of rolling renewals of BOTAŞ contracts was seen as very high. In addition, BOTAŞ gas prices were passed through to the electricity market, thereby hedging gas supply costs effectively.

The sponsors were keen to have the flexibility not to have to enter into gas supply arrangements until nearer to commencement of commercial operations and also to have the upfront approval of the lenders to the possibility of contracts with BOTAŞ and/or private sector gas suppliers going forward.

The lenders recognised the benefits a liberalised gas market could offer the project.

**Agreed gas strategy**

Again, the central challenge was to develop an agreed strategy that would permit Yeni to pursue whichever gas supply arrangements it considered to be the most suitable, while balancing the lenders' requirements for managing supply risk going forward.

The lenders were not averse to introducing flexibility for a mixed supply of gas from BOTAŞ and private sector gas suppliers but this had to be weighed against spark spread risk, needing certainty of supply, acceptability of terms and conditions and creditworthiness of suppliers.

An agreed gas strategy was developed and agreed between the sponsors and the lenders that provided Yeni with the flexibility to enter into gas supply agreements with different tenors, for varying volumes of natural gas and with various suppliers, including foreign importers, in each case, depending upon the prevailing market conditions at the time. The lenders recognised the benefits a liberalised gas market could offer the project and so were willing to put in place a framework allowing for the development of suitable conditions at the relevant time.

**Construction risk**

In addition to determining appropriate solutions to the operational/market risks identified in the project, Lenders were also asked to accept certain risks in relation to the construction of the plant. The more traditional approach to construction risk in the Turkish project finance market was to expect a robust completion guarantee from the project's sponsors. In this case, the sponsors' position was that an international standard EPC contract was being

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offered with proven turbine technology, a reputable and creditworthy contractor and a strong performance security package and, therefore, construction risk and lenders' recourse should be appropriately placed with the EPC contractor (ie, Ansaldo).

The lenders needed to consider both project cost risk and construction completion risk. In terms of project cost risk, the fixed price nature of the EPC contract (together with the technical parameters of the project itself) went far to mitigate concerns about escalating cost overruns and the sponsors were willing to provide appropriate support in case any such costs did arise.

As regards completion risk, the EPC contract was a turnkey contract with the EPC contractor taking date-certain delivery risk and providing performance and availability guarantees thereafter and, again, the sponsors were willing to provide some support for specifically identified third-party risks that could impact completion. On this basis, the lenders were willing to accept that construction risk would predominantly fall to the EPC contractor rather than the sponsors and, therefore, there would be limited recourse during the construction period.

## Sponsor support and security

The sponsors showed their willingness to stand behind the project by providing certain support obligations to the lenders. For example, as mentioned above, the lenders benefit from a limited degree of cost overrun support. There is also a measure of post-completion sponsor support as an additional mitigant for the lenders to look to in considering the market-driven risks of the plant. The sponsors' operational support is, however, subject to certain caps and is intended to diminish over time as the electricity and gas markets settle.

The lenders also benefit from a relatively standard asset security package, including a share pledge over the shares in Yeni, mortgages over land and assignments of certain project documents.

## Conclusion

The Gebze CCGT project is a stand-out example of the ability of sponsors and lenders to work together to create a cohesive framework for project financing gas-fired merchant power plants in the Turkish power sector. The project also demonstrates the potential for a progressive approach within the Turkish project finance market, where solutions can be found to balance the potential risks (and rewards) of the evolving electricity and gas markets and construction risk can be re-examined.

Considerable progress has been made in the Turkish power sector and the Turkish project finance market since the initial BOT projects on which White & Case first acted in the 1990s. We hope that the Gebze CCGT project will serve as a point of reference for financings in the Turkish power sector going forward as further generating capacity is brought on line over the next decade.