CLIFFORD

CHANCE

Briefing note

November 2015

Capacity Market: an EMR Primer

This primer briefing is the second in a series of briefings describing the principal mechanisms introduced as part of the UK Government's Electricity Market Reforms (EMR), namely:

- Contracts for Difference[1];
- Capacity Market Mechanism;
- Carbon Price Floor; and
- Emissions Performance Standard

The EMR reforms have three key aims: to bolster the security of electricity supplies, encourage the decarbonisation of the power sector and keep energy affordable.

This briefing looks at the Capacity Market.

Key issues

This primer explains how the Capacity Market works and covers:

- Eligibility for the mechanism
- The Pre-qualification and auction processes
- The form and content of Capacity Agreements including key milestones and termination provisions
- The delivery of capacity obligations, payments, penalties and trading
- Implementation of the Capacity Market to date

Introduction

The Capacity Market is a mechanism to ensure system stability and reliable electricity supplies at all times. It does this by procuring commitments from generators to be ready to provide additional generation capacity if called upon at times of system stress during the committed period, and rewarding generators by paying them for making that capacity available.

So-called "Capacity Agreements" of between 1 and 15 years are awarded through a competitive auction process. The first auction was held in 2014 for delivery in 2018/2019. The second auction for delivery in 2019/2020 takes place in December 2015.

Eligibility

The Capacity Market is a technology-neutral mechanism in which most types of capacity can participate, including:

- ***New and existing on- or offshore generation plant***: All types of generation plant including combined heat and power (CHP);
- ***Storage***: Stored capacity that can respond immediately to requests to boost capacity;
- ***Demand-side response (DSR)***: Organisations able to reduce demand on request; and
- ***Interconnector Capacity***: Interconnectors will be eligible to participate in the four-year-ahead Capacity Market auction for the first time in December 2015.

[1] See our briefing: Contracts for Difference: an EMR CfD Primer

The capacity of each Capacity Market unit (CMU) must be at least 2MW although there are possibilities for individual generation plants to combine up to 50MW.

The following capacity is ineligible:

- ***Low Carbon Capacity***: Capacity receiving low carbon support (e.g. through the Renewables Obligation, Contracts for Difference, small-scale Feed in Tariffs, Renewable Heat Incentive, New Entrants Reserve 300, UK Carbon Capture and Storage Commercialisation Programme); and
- ***Operating Reserve***: Capacity with contracts to provide Short-Term Operating Reserve (STOR), unless an irrevocable declaration is made to terminate the STOR contracts if awarded a Capacity Agreement.

In addition, a pilot scheme is currently underway to determine whether Electricity Demand Reduction schemes[2] should be eligible for the Capacity Market.

Capacity volume to be auctioned

The Secretary of State for Energy and Climate Change determines how much capacity should be auctioned off for each delivery year to ensure a suitable level of capacity reserve and hence protect system stability and the reliability of electricity supplies.

Delivery Years run from 1 October to 30 September.

Pre-qualification

A pre-qualification process takes place four months before the relevant auction. Although participation in the Capacity Market is voluntary, in principle all generators with a generation licence (as well as other capacity providers intending to participate) must either apply to "prequalify" their existing capacity or seek an opt-out in relation to that capacity.

A separate application through a web portal is required for each CMU a generator or other provider is offering.

The application must contain information about the capacity provider (the provider), the relevant plant and its previous performance. The level of information depends on whether the plant is an existing plant; an existing plant seeking support for refurbishment; a potential new plant; or whether the offer is one of DSR. In particular, information on new build plants is required to determine the likelihood that they will be ready in time to provide the relevant capacity (including provision of relevant planning consents). Where DSR arrangements have not been subject to testing under the rules (unproven DSR), the applicant will be required to provide credit cover in relation to its obligations. Additional credit cover requirements apply to new build CMUs until they satisfy the Financial Commitment Milestone (see below under "*Capacity Agreement – Form and Terms"*).

The Delivery Body, National Grid, will check applications to determine the eligibility of providers, and consider whether providers can deliver the capacity they offer. Information from the pre-qualification process about opted-out capacity is also used to adjust the amount of required capacity. Decisions on pre-qualification can be appealed firstly to the Delivery Body itself and then to Ofgem.

The month-long pre-qualification window for the December 2015 "T-4 auction" (see below) ran from 27 July to 28 August 2015.

[2] These schemes involve energy savings through the installation of more energy-efficiency equipment.

Auctions

Providers who successfully prequalify are entitled to bid in the relevant auction for a capacity obligation (CO) in relation to their capacity. Providers must include the total de-rated capacity of the CMU in the auction (except for DSR which can nominate a lesser amount). The capacity auction is a "pay-as-clear" method. This method works on a "descending clock" basis under which providers state the number of COs they wish to take on at an announced price. The price is reduced until the bids for COs match the available capacity in the auction – this sets the "clearing price" which all bidders then receive. Bidders can submit an exit bid, the minimum price at which they are willing to take an obligation – such bidders withdraw from the auction when the price falls below their exit bid price.

If successful at auction, a CMU will be awarded a Capacity Agreement at the clearing price.

A main capacity auction is held every year for delivery in four year's time (e.g. the auction run in 2015 is for delivery in 2019/20), known as the "T-4 auction". A smaller amount of capacity is held back until a further "year-ahead" auction, the "T-1 auction". This is held in the year immediately prior to the Delivery Year of the main auction.

Additional transitional auctions are being run for DSR capacity, the first of which is for the Delivery Year 2016/17.

Capacity Agreements

Duration

One year Capacity Agreements are offered to existing plants. Capacity Agreements of up to three years are offered for existing plants that can demonstrate that they require major refurbishment (Refurbishing CMUs). New plants or those with certain new build elements (New Build CMUs) are able to access contracts up to a maximum of 15 years. The Government is currently considering whether to retain the three year agreement category in its latest consultation exercise (see further below on the consultation).

The right to access an extended duration agreement is dependent on a provider exceeding the threshold of capital expenditure on the CMU which is prescribed for in each auction. For example, in the 2015 auction, capital expenditure must exceed:

- £255/kW de-rated capacity, to obtain a 15 year agreement; and
- £130/kW de-rated capacity, to obtain a three year agreement.

Form and Terms

The Capacity Agreement is a combination of the rights and obligations in the Capacity Market Regulations and Rules[3], and a Capacity Agreement Notice (issued by National Grid) which records the specific details relevant for each CMU including, for example, description of the CMU, delivery year/s, capacity obligation, clearing price and, for prospective CMUs, the longstop date (see below). A Capacity Agreement is enforceable by Ofgem against the provider.

Milestone requirements

Additional requirements are placed on New Build CMUs and Refurbishing CMUs[4] to demonstrate:

- ***Financial Commitment Milestone***: That 10% of anticipated total project capital expenditure has been incurred, or other specified evidence of financial commitment is provided, within 18 months of the Capacity Agreement being awarded; where this is not achieved:

[3] The Electricity Capacity Regulations 2014 and the Capacity Market Rules 2014.
[4] The milestones set out here are for generation CMUs (as opposed to Interconnector CMUs).

  - For Refurbishing CMUs: The Capacity Agreement will generally revert to a one year duration on the basis of the plant's pre-existing generation capacity before the planned refurbishment; and
  - For New Build CMUs: This will be a termination event.
- ***Substantial Completion Milestone***: That 90% of the anticipated capacity has been achieved:
  - For Refurbishing CMUs: Where this is not met by the start of the first Delivery Year, the agreement will again generally revert to a one year duration based on pre-existing generation capacity;
  - For New Build CMUs: Capacity payments will only be payable once the Substantial Completion Milestone is achieved, so if the plant is not ready by the beginning of the first Delivery Year, this will reduce the length of the agreement accordingly; and
  - In either case, payments will only be made up to the level of capacity provided but participants can increase the capacity up to 100% (and receive payments accordingly for that capacity) within 18 months of the start of the Delivery Year.
- ***Minimum Completion Requirement***: New Build CMUs need to have achieved 50% of stated capacity by the long stop date of 12 months after the beginning of the first Delivery Year in order for the Capacity Agreement to take effect on the basis of the operational capacity actually achieved. If this has not occurred, the Capacity Agreement can be terminated (subject to a cure period).

Termination

Termination of a Capacity Agreement by the Delivery Body can occur for a number of different reasons including:

- Failure to meet the Financial Commitment Milestone or the Substantial Completion Milestone for a New Build CMU;
- Failure to procure a relevant grid connection offer;
- Capacity failing to meet ongoing eligibility requirements or other necessary criteria; and
- Various insolvency events.

Termination fees are payable by a non-compliant provider. Examples include fees of:

- £25,000/MWh de-rated capacity for failure of a New Build CMU to meet the Minimum Completion Requirement; and
- £5,000/MWh de-rated capacity for failure of a New Build CMU to meet the Financial Commitment Milestone.

Capacity Obligations, Payments and Penalties

At times of system stress, a "capacity market warning" will be issued by National Grid to all providers with COs requiring that they must deliver their capacity in four hours time should a "stress event" occur. A stress event happens when there is involuntary load reduction or the Delivery Body has to control voltage or reduce load on the system for 15 minutes or more. At this time, providers must be ready to provide their total capacity calculated from COs acquired in the T-4 and T-1 auctions, plus or minus any secondary traded obligations they have acquired or disposed of (see below). In an actual stress event, all providers will be required to provide the same proportion of their total COs to meet the necessary demand level.

Capacity payments are made monthly in arrears to providers by the Settlement Body[5]. These payments are funded by a compulsory levy on all licensed electricity suppliers.

Failure to deliver on COs during a stress event will lead to penalties. The penalty rate is set at 1/24th of the relevant auction clearing price, adjusted for inflation. Penalties are capped at 200% of a provider's monthly capacity revenues and an annual cap of 100% of annual revenues. Providers that over-deliver during a stress event where other providers have failed to will receive over-delivery payments.

---

[5] The Settlement Body is the Electricity Settlements Company, a Government-owned company. In practice, a settlement service provider (a subsidiary of Elexon Ltd) will handle the making of payments.

Trading

Providers are able to transfer their COs in two ways:

- ***Obligation Trading***: Following the T-1 auction, providers are able to trade their COs with other prequalified capacity. Once the trade has been made, the original holder no longer receives any capacity payments and has no exposure to any penalties. Some changes to the regulations are still needed in order for obligation trading to take place following the first T-1 auction; and
- ***Volume Reallocation***: Following a stress event, a provider who has over- delivered can reallocate excess output to another provider which did not deliver all or part of its capacity during the stress event.

Providers are also able to hedge the risk of penalties by agreeing to pay a third party a premium to cover a penalty in the event of a stress event. The details of the trade would be agreed privately between the parties and there is no requirement for the hedge provider to qualify to participate in the Capacity Market.

Transfer of Agreements and CMUs

Aside from trading its COs, a provider may wish to transfer the Capacity Agreement as a whole (i.e. all rights and obligations under the agreement) to a third party. However, it can only do this along with a transfer of the CMU, i.e. by asset sale. Similarly, transfer of a CMU which holds COs can only be made alongside transfer of the Capacity Agreement, and only to an acceptable transferee.

Implementation to date

The first Capacity Market "T-4" auction began on 16 December 2014, and cleared on 18 December 2014, procuring 49.3GW of capacity at £19.40 per kW for the first Delivery Year in 2018/19. This first auction was heavily criticised by commentators, in particular for awarding around 2/3 of the capacity to fossil fuel plant, with only around 5% of capacity being awarded to new build projects.

The next T-4 auction for first year delivery in 2016/17 will begin on 8 December 2015.

In the meantime, the Government has begun a consultation exercise on changes aimed at making the regime more effective, but simpler and more transparent. Key proposals include:

- Strengthening the requirement for new build projects to demonstrate financial commitment pre-auction, with possible increases in credit cover where new post-auction financing tests are not met;
- Expanding the possibilities for obligation trading;
- Expanding the opportunities for aggregation of plant with different owners into a CMU; and
- Considering moving forward the T-1 auction to facilitate more types of capacity being able to participate successfully.

The Government is also considering how to ensure that the Capacity Market can help bring forward new build gas-fired capacity. The intention is to finalise any changes in time for the 2016 Capacity Auction. In the meantime, Ofgem is also considering some technical changes to the Capacity Market Rules.

Contacts

Nigel Howorth
Partner

Energy & Resources Group

T: +44 20 7006 4076
E: nigel.howorth
@cliffordchance.com

James Pay
Partner

Energy & Resources Group

T: +44 20 7006 2625
E: james.pay
@cliffordchance.com

James Shepherd
Senior Associate

Energy & Resources Group

T: +44 20 7006 4582
E: james.shepherd
@cliffordchance.com

Michael Coxall
Senior Professional Support Lawyer

Energy & Resources Group

T: +44 20 7006 4315
E: michael.coxall
@cliffordchance.com

69697-5-1676