

Chapter 3: Capacity Payments and Charges



Capacity Payments and Charges – 1/13

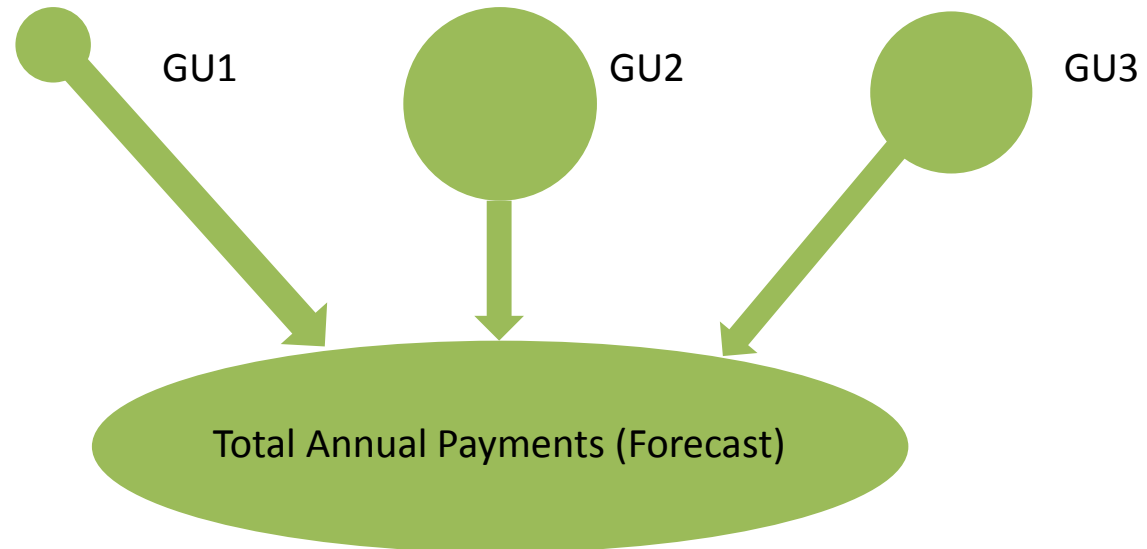
- Capacity Payment:
 - This is the payment to a Capacity Market Unit for being successful in a Capacity Auction or Secondary Trade;
 - Each successful auction or secondary trade has an individual Contract Register Entry with Capacity Quantity and Capacity Payment Price;
 - Payment is simply:
 - Quantity times Price;
 - Calculated in every Imbalance Settlement Period in which the Contract Register Entry is active;
 - Summed for all Contract Register Entries relevant to the Capacity Market Unit; and
 - Summed for all Imbalance Settlement Periods over which the entry is active (e.g. if a secondary trade is to cover 1 week) within the Capacity Period (i.e. a month).
- Capacity Payments only apply once the capacity is commissioned:
 - There are rules in the Capacity Market Code around what proportion of capacity must be delivered to be considered “commissioned”;
 - Similarly, Difference Charges only apply after commissioning.

Capacity Payments and Charges – 2/13

- Capacity Charge:
 - This is a charge to recover the costs of the Capacity Payments for Capacity Market Units;
 - It is based on a tariff calculated by considering total Capacity Payments and year ahead demand forecasts;
 - This tariff is then applied against a Supplier Unit's net metered demand, in a pre-defined subset of Imbalance Settlement Periods;
 - Since Storage units are Generator Units, not Supplier Units, these charges do not apply to them;
 - Charges only apply to Trading Site Supplier Units if the Trading Site is net importing.
- The following slides illustrate the features of, and relationship between, capacity payments and charges.

Capacity Payments and Charges – 3/13

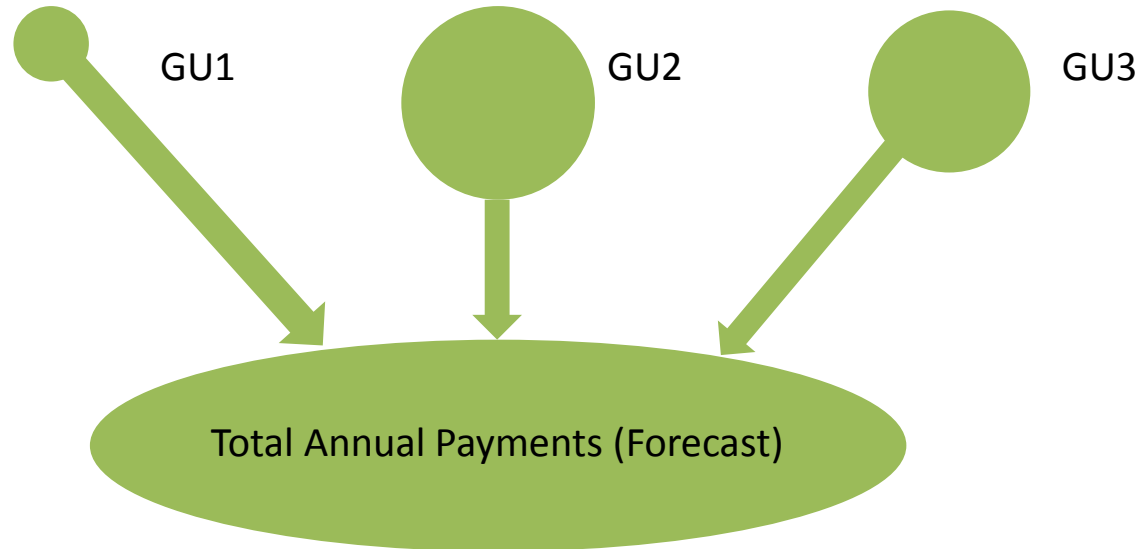
Auction Results



- Starting off in the simplest level, Capacity Payments are based on the Capacity Quantity and Capacity Payment Prices awarded to Capacity Market Units from auctions and secondary trades. Once these have been awarded and the physical assets are commissioned, the CMU will receive a regular payment every month.
- After all the primary capacity auctions have been run and the Capacity Requirement awarded to Capacity Market Units for a year, it is possible to use the results of the auctions to calculate the total amount that all Capacity Market Units are going to be paid for the year. This can be used to calculate what Suppliers need to be charged in order to meet these payments.

Capacity Payments and Charges – 4/13

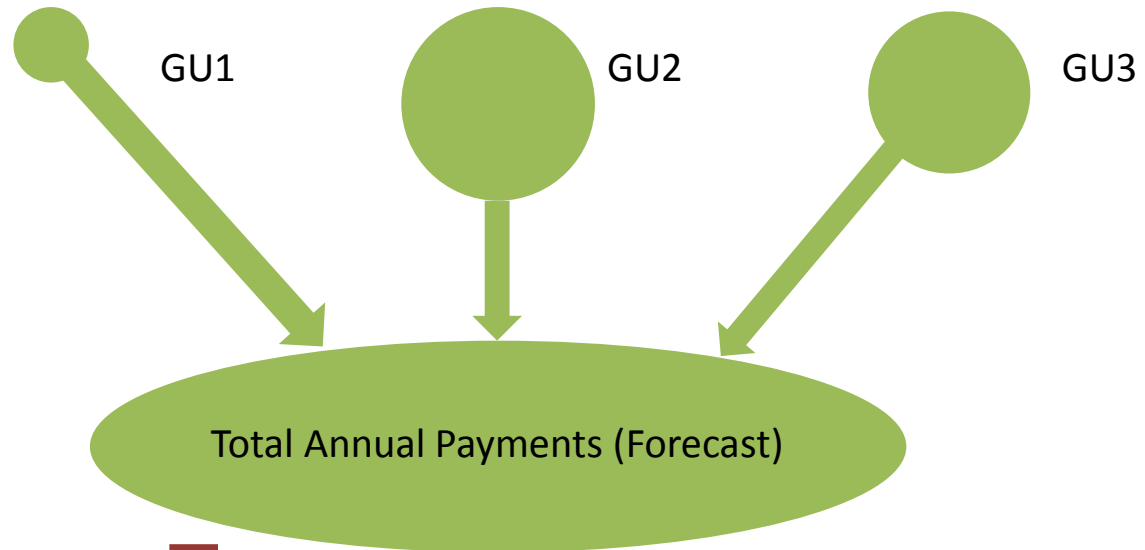
Auction Results



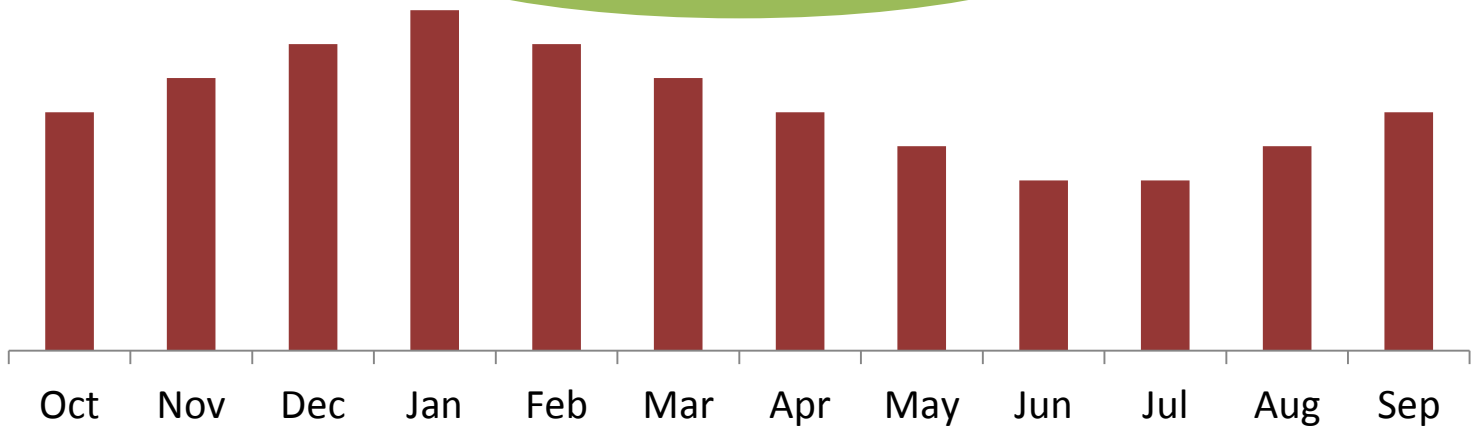
- As well as the total amount to be paid, the level of Supplier demand which will need to make this payment needs to be forecasted. As the payments to be met are over a year, and the charge to meet these payments is levied in particular chosen half hours over the year, the demand in those periods needs to be forecasted and summed over the year.

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Auction Results

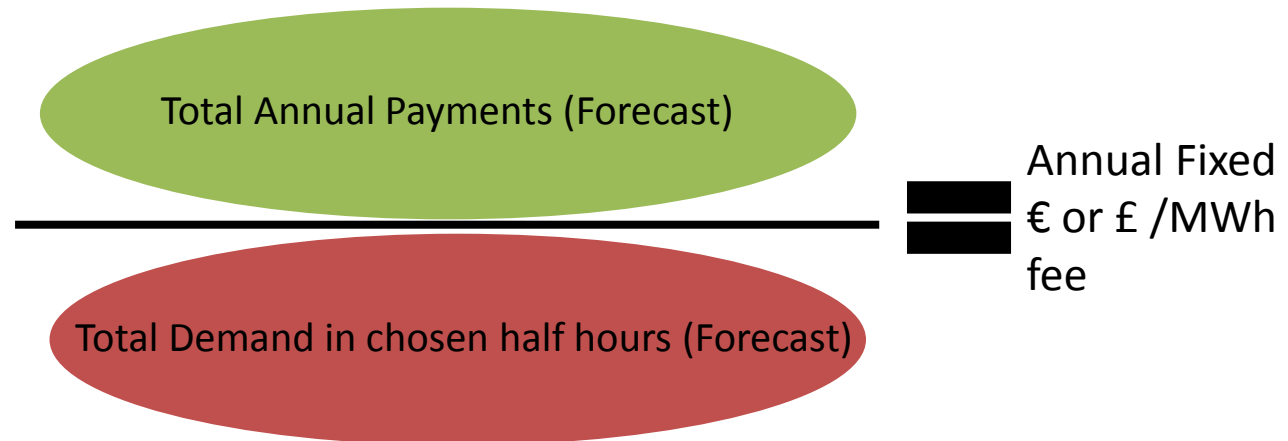


Demand in chosen half hours (Forecast)



Capacity Payments and Charges – 6/13

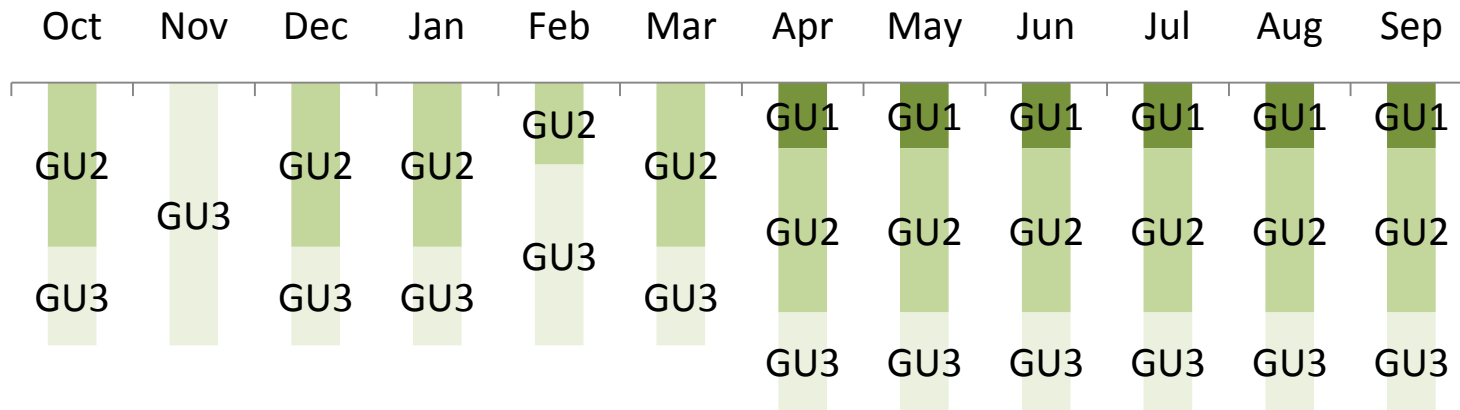
- Once forecasted, the total forecast payments over the year can be divided by the total forecast demand which forms the Suppliers' charging base to calculate a fixed price for the year.
- This fixed price allows demand customers to know exactly what they are paying for capacity every time they are consuming.



Capacity Payments and Charges – 7/13

- Now all the information required in order to start making these payments and taking in these charges throughout the Capacity Year (from October to October) is available.
- The Capacity Payments are based on monthly Capacity Periods and are a flat payment based on the Capacity Quantity and corresponding Capacity Payment Price awarded to the unit. The payment made is based on the awards relevant to the unit for the Capacity Period just past. The awarded capacity can be for the whole year (as in the case of the primary capacity auctions), in which case the payment would be for one month's worth of that yearly product. However secondary trading can cover smaller periods, such as a single Capacity Period, single week, or a smaller subset of days or hours, depending on the products traded. The calculation of Capacity Payments will take into account the relative length of these products within the Capacity Period for which the payments are being calculated. Therefore differences in the amounts paid to individual units can be caused by secondary trading between the units – however the net payment required to all commissioned Capacity Market Units should remain the same.
- In this example, between October and November GU2 has sold his capacity to GU3 through secondary trading. GU3 are now receiving all of the payments but on the other side GU2 is no longer exposed to difference charges in that period, for example if GU2 is on an outage in the month. Also, despite having an awarded Capacity Quantity for the Capacity Year, GU1 will only start getting paid from April onwards as that is when it has been commissioned.

Capacity Payments and Charges – 8/13



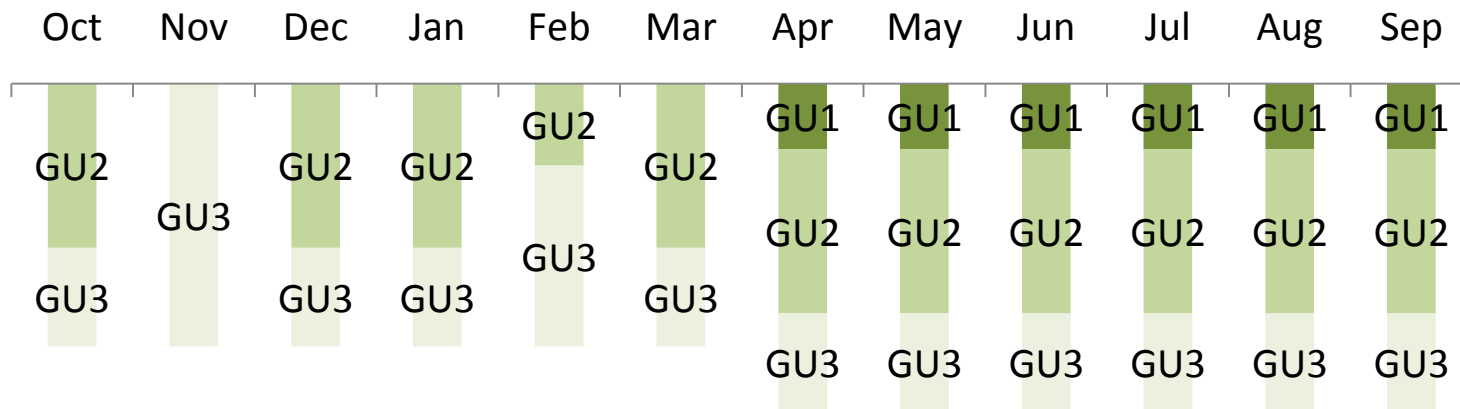
Monthly Capacity Payments based on:

- Primary and Secondary Trades in period;
- Actual Commissioning in period.

Capacity Payments and Charges – 9/13

- On the other side charges are coming in, based on an annual fixed tariff and on the actual Metered Quantity showing the energy Supplier Units consumed in the Capacity Period – focusing on particular half hours chosen by the RAs. These charges are also monthly.
- This fee is charged to Suppliers in specific half-hours of each Settlement Day decided by the RAs. This is done in order to create an incentive on these suppliers to reduce their demand in those periods, moving the demand instead to periods where there is no charge.
- The reason for this is to incentivise demand to go into other periods in order to bring down peak demand. Because the Capacity Requirement is driven by peak demand, the more the peak is brought down the less capacity is required to be procured, which overall can result in a more efficient outcome.

Capacity Payments and Charges – 10/13

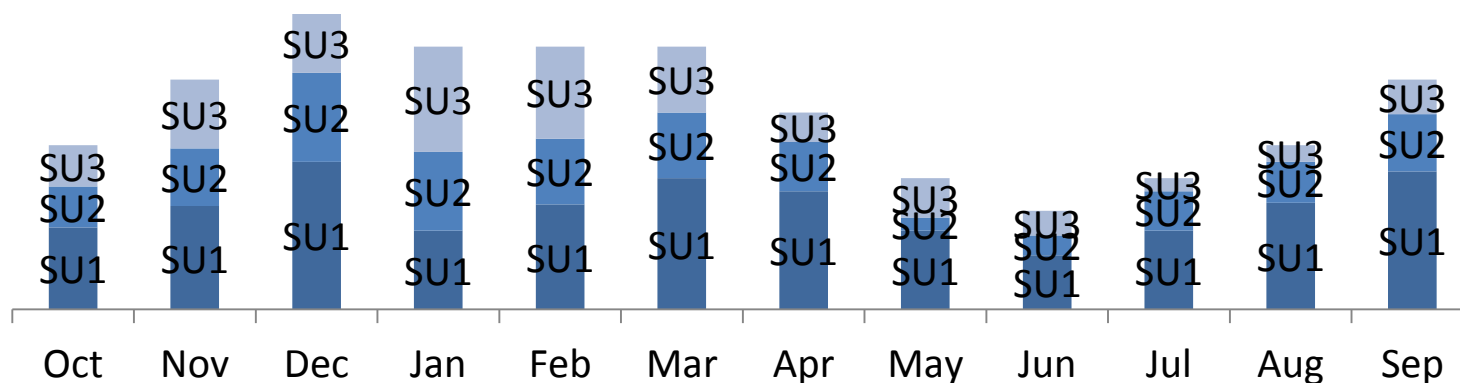


Monthly Capacity Payments based on:

- Primary and Secondary Trades in period;
- Actual Commissioning in period.

Monthly Capacity Charges based on:

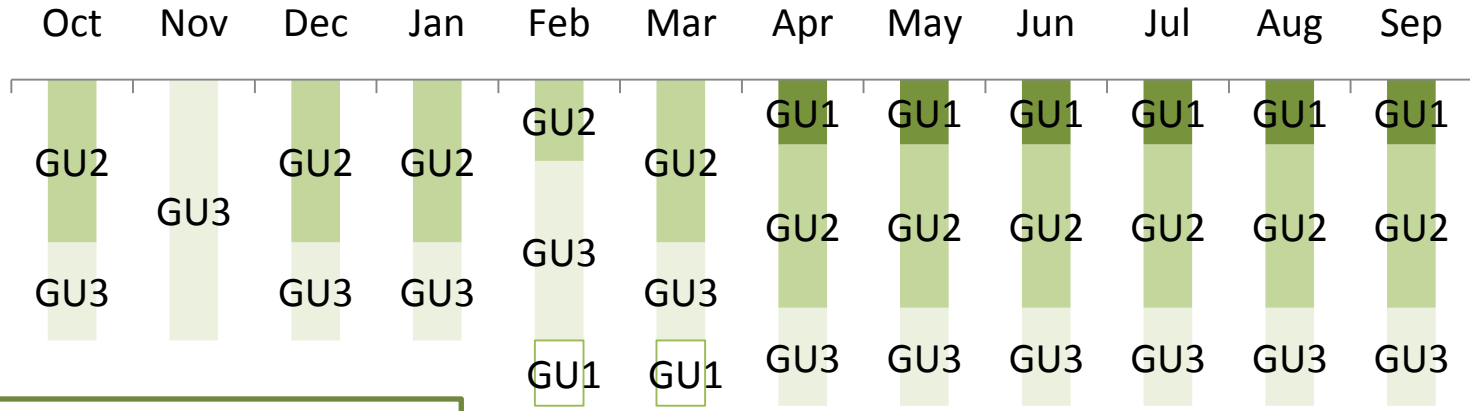
- Actual Consumption in pre-defined periods;
- Annual Fixed € or £ /MWh tariff.



Capacity Payments and Charges – 11/13

- The tariff for Capacity Charges is based on forecasts of demand, therefore some differences can arise where a different amount was consumed to that which was forecast. As Suppliers are incentivised not to consume in those half hours where the charge applies, this could result in under-recovery if they consume less than was forecast.
- In addition, the tariff for the Capacity Charges is based on a forecast of Capacity Payments which could be slightly different to actual final payments. For instance, in this example it was thought in the forecast that the Capacity Market Unit GU1 was going to be commissioned in, and therefore going to be paid from, February, but in reality they commissioned late and are only paid from April.

Capacity Payments and Charges – 12/13

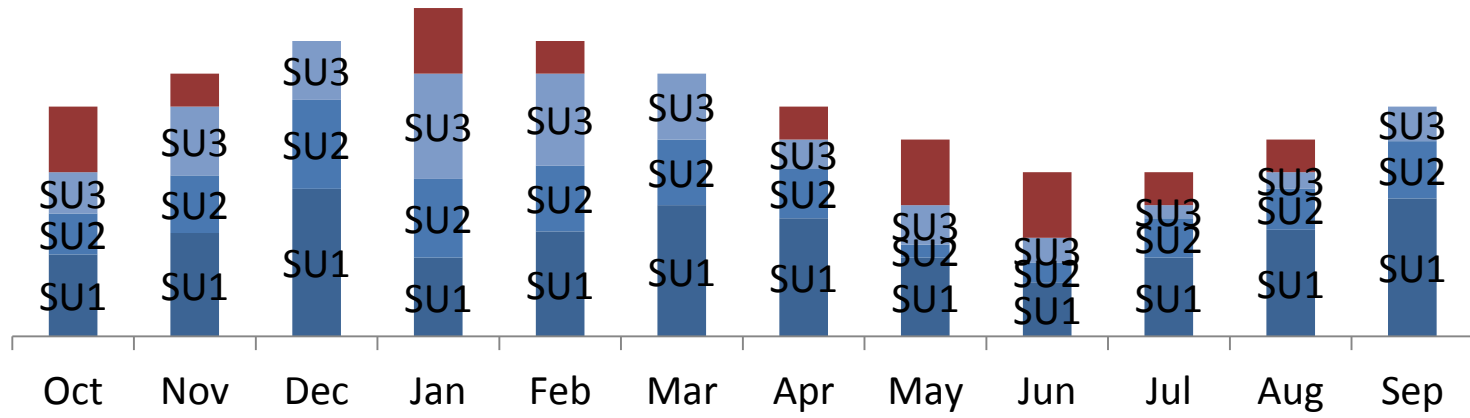


Differences driven by:

- Late unit commissioning;
- One-sided secondary trade.

Differences driven by:

- Actual vs forecast consumption in pre-defined periods.



Capacity Payments and Charges – 13/13

- This means that there can be a mismatch between what is forecasted in terms of charges coming in, and what actually happened. This difference has to be managed on a short term cash flow basis, and on a longer term sufficiency of funds basis.
- On a cash flow basis a shortfall in the charges received relative to the amount needed to make payments can be managed through accessing both a socialization fund (covered later) and any surplus available from other market charges including energy market charges. From a funds sufficiency basis a shortfall or surplus in the charge shall be included in the following year's tariff through a K factor adjustment.

