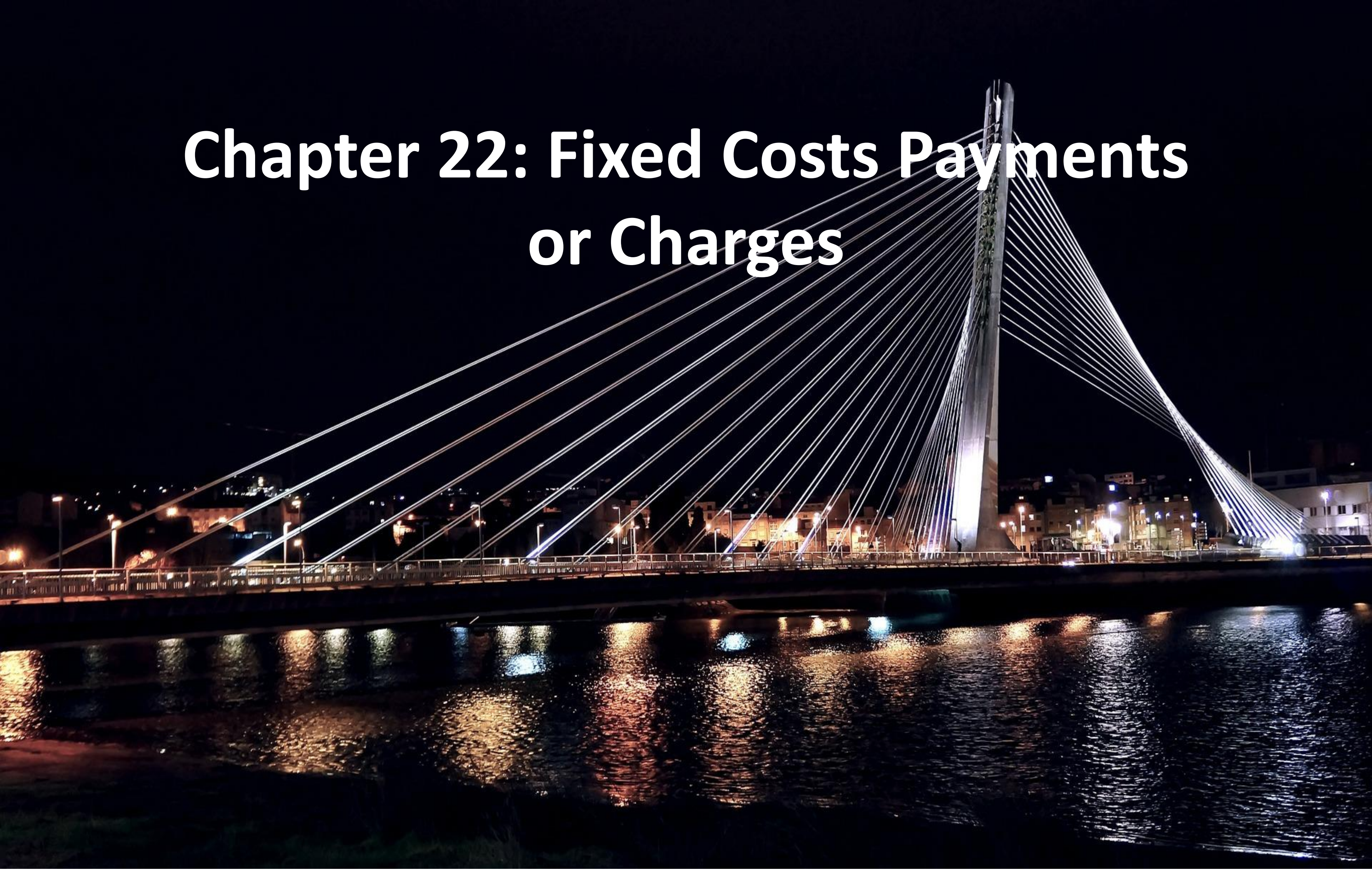
Chapter 22: Fixed Costs Payments or Charges



EIRGRID semo SONI

Single Electricity Market Operator

Fixed Cost Payments or Charges

- Fixed Cost Payments or Charges:
  - Difference between Market Operations (i.e. how a unit would ideally wish to run to meet its ex-ante market trade quantities) and Physical Operations (i.e. how the unit is actually run by the SOs in the operation of the power system) can result in units incurring or saving additional fixed costs versus those incurred in a unit's ex-ante market schedule;
  - Fixed costs include additional or reduced number of starts, and additional or reduced number of Imbalance Settlement Periods where the unit is synchronised and incurring fixed costs for operating.
- Whether these charges or payments apply depends on Commercial Offer Data used in settlement:
  - If settlement is based on Simple format, fixed costs can be incorporated into those Price Quantity Pairs, with fixed costs recovered through the Imbalance and Premium Components;
  - If settlement is based on Complex format, fixed costs are explicitly stated while Price Quantity Pairs represent variable costs, therefore this side-payment mechanism is needed to recover fixed costs.
- This Payment or Charge is intended to:
  - Make the unit whole if their balancing market revenues are not sufficient to cover their additionally incurred fixed costs; and
  - To recover the unit's fixed costs which were saved.
- The mechanism needs to reflect the following:
  - As much as possible, starts for energy balancing reasons should be reflected in, and recovered through ,the Imbalance Price, starts for non-energy reasons should be recovered through side-payments (i.e. this charge);
  - The mechanism must ensure against overrecovery of costs over a Contiguous Operating Period (i.e. take into account if inframarginal rent from Imbalance Settlement Price over period of running covers costs);
  - Build in substitutive Physical Notification functionality so that Intraday Market trades and hence prices fully replace the settlement of Balancing Market orders if they both represented the same output range.

Fixed Cost Payments or Charges

- There are different mechanisms for ensuring that units recover their fixed costs depending on which set of COD applies in settlement;
- If Simple Bid Offer Data applies, then participants have to build their fixed costs into their prices, as the only recovery of these costs they will receive is through their Imbalance Component Payment if they are in-merit (in this way fixed costs are included in the Imbalance Settlement Price also, as they are included implicitly in the Bid Offer Prices which are used to set the Imbalance Price), or through the combination of this and their Premium Component Payment if they are out of merit.

Fixed Cost Payments or Charges

- There are different mechanisms for ensuring that units recover their fixed costs depending on which set of COD applies in settlement;
- If Complex Bid Offer Data applies, fixed costs are intended to be recovered through a make-whole payment for the extent that they have not been recovered through net balancing market revenue:
  - Calculate the sum of the operating costs incurred due to balancing market actions taken on the unit (i.e. the costs of the Incs and Decs, and the additional fixed costs incurred, according to the unit's COD submissions) over a contiguous operating period;
  - Calculate the sum of the revenue in the balancing market (i.e. a sum of all of the energy Payments and Charges highlighted in this training). Uninstructed Imbalance Charges are excluded from this, as this is intended to be a reduction in payment or an increase in charge incurred by the unit, to include it here may mean that the make-whole payment counters this charge and therefore the incentive it creates would be removed.
- Therefore a unit's inframarginal rent (the amount they earn above their offered prices by being settled at the Imbalance Settlement Price) can be considered in meeting their costs first, and if there are additional costs they can be recovered through the make-whole payment. This ensures against overrecovery of these costs.

Fixed Cost Payments or Charges

- In determining the fixed costs which were incurred, the market position of the unit is compared against the dispatch position of the unit. The market position is taken from the unit’s Final Physical Notification Quantity, which ensures that “substitutive PN” functionality is built into the fixed cost element:
  - For example, if the SOs initially instruct a unit to start without any market start, this would be seen as a start up cost incurred under the balancing market, however if the unit subsequently trades in the intraday market for the same period and updates its FPN to reflect this, then the start will not be calculated as having been incurred due to a balancing market action – it substitutes the recovery of the fixed cost through the balancing market for being recovered through the intraday market.
  - This means that the unit will have to consider their fixed costs in the ex-ante markets even if the SO has already started them, as a market start up would remove the cost as being one incurred under the balancing market, and so the unit would need to recover the cost through the intraday market trade.

Fixed Cost Payments or Charges

- The mechanism works by carrying out the following five steps:
  1. Works out Physical and Market Operation characteristics for the Billing Period, including when the unit started, ended, and initial conditions at beginning of Billing Period;
  2. Works out if additional fixed costs incurred or saved by comparing Physical and Market Operation characteristics;
  3. Calculates balancing market revenues received, and costs incurred by the unit due to balancing market operations (including additionally incurred fixed costs);
  4. Compares balancing market revenues and costs to calculate make-whole payment if revenue was insufficient to cover costs;
  5. Calculates final Fixed Cost Payment or Charge by subtracting recoverable fixed costs which were saved.