

| | 2019/2020 | 2018/2019 | 2019/2020 | 2018/2019 |
|---|------------------|------------------|-----------------|-----------------|
| | YTD Outturn (€m) | YTD Outturn (€m) | Q1 Outturn (€m) | Q1 Outturn (€m) |
| CPREMIUM | 30.2 | 36.2 | 30.2 | 36.2 |
| CDISCOUNT | 24.5 | 26.0 | 24.5 | 26.0 |
| CABBPO | 0.1 | 0.2 | 0.1 | 0.2 |
| CAOOPO | 0.2 | 0.0 | 0.2 | 0.0 |
| CTEST | 0.0 | -0.1 | 0.0 | -0.1 |
| CUNIMB | -0.8 | -0.5 | -0.8 | -0.5 |
| CCURL | -0.6 | -2.2 | -0.6 | -2.2 |
| Interconnector Ramp Rate Disparity (from CIMB) | Note [4] | Note [4] | Note [4] | Note [4] |
| Dispatch Balancing Costs (DBC) | 53.6 | 59.6 | 53.6 | 59.6 |
| Fixed Cost Charges/Payments (CFC) ^[1] | 9.2 | 44.1 | 9.2 | 44.1 |
| Other System Charges (OSC) ^[2] | -1.3 | -1.8 | -1.3 | -1.8 |
| Imperfections Costs Outturn | 61.5 | 101.9 | 61.5 | 101.9 |
| Imperfections Costs Forecast | 68.6 | 55.3 | 68.6 | 55.3 |
| Variance: Forecast Vs. Outturn ^[3] | -7.1 | 46.6 | -7.1 | 46.6 |
| Variance % | -10.3% | 84.3% | -10.3% | 84.3% |

Key Points

- Costs for the 19/20 year are based on actual initial settlement figures. There will be variations in the final year-end figures as a result of resettlement, system defect fixes and Trading & Settlement Code modifications.
- Costs for the 18/19 year are based on the M+4 & M+13 settlement figures where available. ^[5]
- The Imperfections Cost Forecast is profiled based on the RA approved model, which assumed zero payments for OSC.
- The Imperfections Cost Outturn is subject to fluctuation relative to the forecast.




| Key Factors Affecting Imperfections Costs | Forecast Assumptions for TY1920 [11] | Actual TY1920 | Impact[12] |
|--|---|---|------------|
| T&S Code and System Changes | Data as per forecast submission | In general, T&S Code and system changes have had much less of an impact on imperfections costs in comparison to the quarters throughout the 18/19 tariff year . | → |
| Reserve Policy and TCGs[6] | Primary & Secondary Operating Reserve 75% LSI[7] TCG data as forecast per submission | No significant change from the forecast this quarter. | → |
| Reserve Provision | Data as per forecast submission | There was no change to reserve provision from the forecast in this quarter. | → |
| System Demand | Data as per forecast submission | Actual system demand was broadly in line with forecast. | → |
| Forced Generation Outages | Data as per forecast submission | The average forced outage rate for the quarter was 13%, almost double the forecast. This difference would have led to increased imperfections costs.[8] | ↑ |
| Scheduled Generation Outages | Data as per forecast submission | Scheduled generation outages were broadly in line with forecast making no significant impact on imperfections costs. | → |
| Forced Transmission Outages | No outages forecast | There were unplanned outages on the 400 kV and 220 kV networks, which resulted in constrained generation. | ↑ |
| Scheduled Transmission Outages | Data as per forecast submission | Scheduled transmission outages were largely in line with those forecast. | → |
| Commercial Offer data - Fuel Costs & Carbon[9] | Data as per forecast submission | Wholesale fuel prices for the quarter were as follows: <ul style="list-style-type: none"> • Gas: 51% lower than forecast • Coal: 36% lower than forecast • Oil: 9% lower than forecast • Carbon: 32% higher than forecast • Distillate: 12% lower than forecast This difference, particularly in the gas price, was a significant factor in lowering imperfections costs for the period. | ↓ |
| Wind Variability | Data as per forecast submission | Installed all-island capacity at end of period: 5403 MW The average wind capacity factor for the quarter was 30% which was in line with forecast.[10] | → |

Mitigation Measures

The following are a list of mitigation measures undergoing review to seek to increase downward pressure on imperfection costs:

1. Daily review of Non-Compliances / Performance Monitoring events e.g. trips;
2. Weekly review of imperfections costs and drivers;
3. Ongoing review of Reserve Policy and TCGs ^[6];
4. Flexibility services as required;
5. Grid Code/ Trading and Settlement Code review and modifications;

Notes

- [1] The imperfections cost forecast includes an estimate for Make Whole Payments. Make Whole Payments are not subject to the incentive process.
- [2] Includes Other System Charges up to November 2019 as December figures were unavailable at time of publishing. Published at www.EirGridGroup.com and www.Soni.ltd.uk.
- [3] Positive value indicates outturn is higher than forecast. Negative value indicates outturn is lower than forecast.
- [4] A number of defects have been identified in the settlement of interconnectors. A recent estimate of the net position at the end of Q1 is a charge to the TSO of €500k. This has not been included in the figures in the table above as it was based on shadow settlement.
- [5] Significant differences between the initial and final settlement runs for the 18/19 year are present due to defects and trading & settlement code modifications which were unforeseen. Resettlement of 18/19 is still ongoing with further changes expected. The same variation in resettlement is not expected in the 19/20 tariff year.
- [6] TCGs mean Transmission Constraint Groups or Operational Constraints as published at www.EirGridGroup.com and www.Soni.ltd.uk.
- [7] LSI means the Largest Single Infeed which is used in the calculation of the system reserve requirement.
- [8] Calculated from the average monthly all-island forced outage rates from October 2019 to December 2019.
- [9] The forecast and actual fuel and carbon costs were based on data taken from Thomson Reuters.
- [10] The installed wind capacity is the December 2019 figure as published at www.EirGridGroup.com/how-the-grid-works/renewables. Wind capacity factor is an indicative figure.
- [11] Forecast is over an annual time horizon. Information and figures are for this period unless otherwise stated. Forecast assumptions are published at: <http://www.semcommittee.eu>
- [12] Increase from Forecast 
Decrease from Forecast 
No Change from Forecast 

Component Description

Fixed Cost Charges/Payments: Payments for additional fixed costs incurred, or charges for fixed costs saved from dispatching a unit differently to its market position, if not sufficiently covered through the unit's other payments or charges.

Dispatch Balancing Costs are made up of the following components:

- **CPREMIUM:** Paid when an offer is scheduled in balancing (and delivered) at an offer price above the imbalance settlement price.
- **CDISCOUNT:** Paid when a bid is scheduled in balancing (and delivered) at a bid price below the imbalance settlement price.
- **CABBPO/ CAOPO:** Bid Price Only and Offer Price Only Payments and Charges, adjustment payment or charge to result in net settlement at the offer price for increments, or bid price for decrements, for undo actions on generators.
- **CCURL:** Adjustment payment or charge to result in net settlement at a specific curtailment price for curtailment actions on generators.
- **CTEST:** Charges applied to units under test.
- **CUNIMB:** Charges for imbalances, and bids and offers accepted in balancing but not delivered, which were outside of a tolerance. Undelivered quantities are settled at the imbalance settlement price.