

	2019/2020 YTD Outturn (€m)	2018/2019 YTD Outturn (€m)	2019/2020 Q4 Outturn (€m)	2018/2019 Q4 Outturn (€m)
CPREMIUM	121.0	108.6	33.0	20.9
CDISCOUNT	110.6	104.6	38.8	23.3
CABBPO	0.1	0.4	0.0	0.0
CAOPO	-0.3	-0.3	-0.2	-0.2
CTEST	0.0	-0.2	0.0	0.0
CUNIMB	-2.1	-2.7	-0.3	-0.4
CCURL	-2.8	-4.2	-0.7	-0.5
Interconnector Ramp Rate Disparity [4]				
Interconnector Counter Trading [5]				
Dispatch Balancing Costs (DBC)	226.5	206.2	70.6	43.1
Fixed Cost Charges/Payments (CFC) [1]	21.0	98.2	1.2	6.6
Other System Charges (OSC) [2]	-5.1	-7.0	-1.1	-1.5
Imperfections Costs Outturn	242.4	297.4	70.7	48.2
Imperfections Costs Forecast	271.3	197.6	53.3	40.7
Variance: Forecast Vs. Outturn [3]	-28.9	99.8	-17.4	7.5
Variance %	-10.7%	50.5%	-32.6%	18.4%

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 and Settlement Code modifications.
- 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.
- Costs for the 18/19 year are based on M+4 & M+13 settlement figures where available. [6]

Key Factors Affecting Imperfections Costs	Forecast Assumptions for TY1920 [10]	Actual TY1920	Impact[13]
T&S Code and System Changes	Data as per forecast submission	In general, T&S Code and system changes have again had much less of an impact in comparison to the quarters throughout the 18/19 tariff year.	→
Reserve Policy and TCGs[7]	Primary & Secondary Operating Reserve 75% LSI[8] TCG data as forecast per submission	Changes to TCGs, particularly in relation to run-hour constraints, increased imperfections costs.	↑
Reserve Provision	Data as per forecast submission	There was no change to the Reserve Provision from the forecast this quarter.	→
System Demand	Data as per forecast submission	Actual system demand was lower than forecast due to the effects of the COVID 19 pandemic, slightly increasing imperfections costs.	↑
Forced Generation Outages	Data as per forecast submission	The average forced outage rate for the quarter was 19% [9], almost triple the forecast. This difference was a driver of increased imperfections costs.	↑
Scheduled Generation Outages	Data as per forecast submission	There were changes to the scheduled generation outages due to the COVID 19 pandemic affecting the ability of generators to take outages. This would have reduced costs from the forecast.	↓
Forced Transmission Outages	No outages forecast	There were unplanned outages on the 220 kV and 110 kV networks. The unplanned outages and run-hour constraint resulted in constrained generation & increased imperfections costs.	↑
Scheduled Transmission Outages	Data as per forecast submission	The Transmission Outage Programme 2020 was paused in March and largely re-scheduled due to the COVID 19 pandemic. The impact on imperfection costs due to this change was less for this quarter.	→
Commercial Offer data - Fuel Costs & Carbon[10]	Data as per forecast submission	Wholesale fuel prices for the quarter were as follows; Carbon: 50% higher than forecast, Coal: 41% lower than forecast, Gasoil: 46% lower than forecast, Gas: 59% lower than forecast, Oil: 11% higher than forecast. This difference, particularly in the gas price, was a significant driver lowering imperfections costs for the period.	↓
Wind Variability	Data as per forecast submission	Installed all-island capacity at end of period: 5511 MW [11]. The average wind capacity factor for the quarter was 20% which was lower than forecast.	↓

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. On-going review of Reserve Policy and TCGs ^[7];
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 September 2020. 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 the interconnectors. A recent estimate of the year end net position is a charge of €3.2m to the TSO. This has not been included in the figures in the table above as it was based on a shadow settlement.
- [5] The cost of interconnector counter trading for the quarter is estimated to be €6.7m. This has not been included in the figures in the table above.
- [6] M+13 have been completed up to week 30 and M+4 have been completed for the entire 18/19 year.
- [7] TCGs (Transmission Constraint Groups) or Operational constraints as published at www.eirgridgroup.com and www.soni.ltd.uk.
- [8] LSI means the Largest Single Infeed which is used in the calculation of the system reserve requirement.
- [9] Calculated from the average monthly all-island forced outage rates from July 2020 to Sep 2020.
- [10] The forecast and actual fuel and carbon costs were based on data taken from Thomson Reuters.
- [11] The installed wind capacity is the September 2020 figure as published on www.eirgridgroup.com.

[12] 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>

- [13] 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.