

	2020/2021 YTD Outturn (€m)	2019/2020 YTD Outturn (€m)	2020/2021 Q4 Outturn (€m)	2019/2020 Q4 Outturn (€m)
CPREMIUM	127.3	121.0	33.0	33.0
CDISCOUNT	133.9	110.6	49.0	38.8
CABBPO	0.3	0.1	0.1	0.0
CAOPO	-1.1	-0.3	-0.2	-0.2
CTEST	-0.5	0.0	-0.3	0.0
CUNIMB	-3.9	-2.1	-1.8	-0.3
CCURL	-1.8	-2.8	-0.5	-0.7
Interconnector Ramp Rate Disparity <sup>[4]</sup>				
Interconnector Counter Trading <sup>[5]</sup>				
<b>Dispatch Balancing Costs (DBC)</b>	<b>254.2</b>	<b>226.6</b>	<b>79.3</b>	<b>70.6</b>
<b>Fixed Cost Charges/Payments (CFC) <sup>[1]</sup></b>	<b>23.3</b>	<b>21.0</b>	<b>-0.4</b>	<b>1.2</b>
<b>Other System Charges (OSC) <sup>[2]</sup></b>	<b>-3.8</b>	<b>-7.0</b>	<b>-1.0</b>	<b>-1.5</b>
<b>Imperfections Costs Outturn</b>	<b>273.7</b>	<b>240.6</b>	<b>77.9</b>	<b>70.4</b>
<b>Imperfections Costs Forecast</b>	<b>301.5</b>	<b>271.3</b>	<b>66.1</b>	<b>53.3</b>
<b>Variance: Forecast Vs. Outturn <sup>[3]</sup></b>	<b>-27.8</b>	<b>-30.73</b>	<b>11.8</b>	<b>17.05</b>
<b>Variance %</b>	<b>-9.2%</b>	<b>-11.3%</b>	<b>17.9%</b>	<b>32.0%</b>

### Key Points

- Costs for the 20/21 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 19/20 year are based on M+4 & M+13 settlement figures where available. <sup>[6]</sup>

Key Factors Affecting Imperfections Costs	Forecast Assumptions for TY2021 <sup>[11]</sup>	Actual TY2021	Impact <sup>[12]</sup>
T&S Code and System Changes	Data as per forecast submission	Changes present in Release F (04/11/20) may decrease imperfections costs.	↓
Reserve Policy and TCGs <sup>[7]</sup>	TCG data as forecast per submission	The increase of must run TCGs for system security reasons, from 1 unit to 4 units (19/04/21) and 4 units to 8 (13/09/21) has increased imperfections costs.	↑
Reserve Provision	Data as per forecast submission	Inclusion of 60 MW (NI) and 23 MW (IE) battery reserve has resulted in a reduction of minimum regulating POR. This has lowered imperfection costs.	↓
System Demand	Data as per forecast submission	Actual system demand was higher than forecast. This would typically decrease imperfections costs.	↓
Forced Generation Outages	Data as per forecast submission	The average forced outage rate for the quarter was 27.07% <sup>[8]</sup> ; forecast assumed 12.79% forced outage rate. This difference had minimal impact on imperfections costs because this has reduced the incidence of generators being dispatched away from their PNs.	→
Scheduled Generation Outages	Data as per forecast submission	The scheduled generation outages were less than forecast and this has decreased imperfection costs.	↓
Forced Transmission Outages	No outages forecast	The unplanned outages increased imperfections costs.	↑
Scheduled Transmission Outages	Data as per forecast submission	The scheduled transmission outages were significantly less than forecast and decreased imperfection costs.	↓
Commercial Offer data - Fuel Costs & Carbon <sup>[9]</sup>	Data as per forecast submission	Wholesale fuel prices for the quarter were as follows; Carbon: 191% higher than forecast, Coal: 134% higher than forecast, Gasoil: 59% higher than forecast, Gas: 309% higher than forecast, Oil: 48% higher than forecast. This difference increased imperfections costs for the period.	↑
Wind Variability	Data as per forecast submission	Installed all-island capacity at end of period: 5,576.1 MW <sup>[10]</sup> , which is slightly above forecast. The average wind capacity factor for the quarter was 13%, which is slightly below forecast. These had minimal impact on imperfection costs.	→

## 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 <sup>[7]</sup>;
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.

[2] Includes Other System Charges up to Sep 2021. Published at [www.eirgridgroup.com](http://www.eirgridgroup.com) and [www.soni.ltd.uk](http://www.soni.ltd.uk).

[3] Positive value indicates outturn is higher than forecast. Negative value indicates outturn is lower than forecast.

[4] This cost item is included in the residual error and is not included in imperfections costs. These costs have therefore been removed from the Quarterly Imperfections Cost Reports.

[5] The elements of this cost item that are recovered through imperfections are captured in the table above under CDiscount and CPremium costs. Any additional Interconnector Counter Trading costs are accounted for in the tariff k factors in Ireland and the SSS tariff in Northern Ireland, and have therefore been removed from the Quarterly Imperfections Cost Reports.

[6] M+13 have been completed up to week 37 FY 19/20 and M+4 have been completed for the FY 19/20.

[7] TCGs (Transmission Constraint Groups) or Operational constraints as published at [www.eirgridgroup.com](http://www.eirgridgroup.com) and [www.soni.ltd.uk](http://www.soni.ltd.uk).

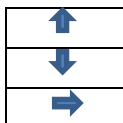
[8] Calculated from the average monthly all-island forced outage rates from July 2021 to September 2021.

[9] The forecast and actual fuel and carbon costs were based on data taken from Thomson Reuters.

[10] The installed wind capacity is the September 2021 figure as published on [www.eirgridgroup.com](http://www.eirgridgroup.com) and <https://www.soni.ltd.uk>

[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.