

	2018/2019 YTD Outturn (€m)	2017/2018 YTD Outturn (€m)	2018/2019 Q1 Outturn (€m)	2017/2018 Q1 Outturn (€m)
Dispatch Balancing Costs (DBC)	67.2	52.3	67.2	52.3
Fixed Cost Charges/Payments (Include Make Whole Payments) ^[2]	5.8	1.5	5.8	1.5
Other System Charges (OSC) ^[3]	-1.8	-2.5	-1.8	-2.5
Imperfections Costs Outturn	71.2	51.3	71.2	51.3
Imperfections Costs Forecast	56.8	53.6	56.8	53.6
Variance: Forecast Vs. Outturn	14.4	-2.3	14.4	-2.3
Variance % ^[4]	25.4%	-4.3%	25.4%	-4.3%

Key Points

- 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 dependent upon power system conditions and will vary significantly within the year relative to the forecast. The differing power system conditions and external conditions (for example system demand) need to be taken into account when comparing quarterly periods and year to date figures.

Key Factors Affecting Imperfections Costs	Forecast Assumptions for TY1819 ^[5]	Actual TY1819	Impact ^[11]
Reserve Policy and TCGs ^[6]	Primary & Secondary Operating Reserve 75% LSI ^[7] TCG data as forecast per submission	The Tie Line ramp rate limit (S_IARAMP) was in operation on 1st October 2018 but removed in November 2018 following All Island dispatch operational experience. This ramp rate was not in the forecast model so increased DBC while it was in effect in October 2018.	↑
Reserve Provision	Data as per forecast submission:	The minimum daytime operating reserve requirement in Ireland was 135 MW compared to the forecasted figure of 110 MW, thus increasing DBC.	↑
Regulatory Policy Changes	Data as per forecast submission	Following I-SEM go-live on 1st October 2018 new settlement rules were introduced, which impact Imperfections costs. In particular, the rule that generators are paid the better of the Imbalance price and their offer price has resulted in large increases in Imperfections this quarter against the allowed budget. The standard deviation of both Imbalance prices and generator simple offer prices have been greater than forecast. This coupled with higher than forecast fuel prices has been the biggest driver increasing DBC this quarter.	↑
System Demand	Data as per forecast submission	Actual system demand was broadly in line with that forecast.	→
Forced Generation Outages	Data as per forecast submission	Average actual rate for this quarter was 21.21% ^[8] . This is significantly higher than forecast and was a significant driver to increased DBC over the quarter.	↑
Scheduled Generation Outages	Data as per forecast submission	Scheduled generator outages were broadly in line with those forecast.	→
Forced Transmission Outages	No outages forecast	There were some forced outages, including 400kV, which resulted in constrained down/off generation.	↑
Scheduled Transmission Outages	Data as per forecast submission.	Scheduled transmission outages were broadly 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; Gas: 32% higher than forecast, Coal: 14% higher, Distillate: 15% higher, Oil: 18% higher and Carbon: 103% higher. Therefore the cost of constraining on/up generation was higher than forecast and has significantly increased DBC over the quarter.	↑
Wind Variability	Data as per forecast submission	Installed capacity at period end: 4886.2MW ^[10] Average Wind Capacity Factor for Q1 was 34%, which was broadly in line with that 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. 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] Costs are 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. Please Note that energy imbalance costs for Interconnectors were not in the settlement systems at the time of publication.

[2] Fixed Cost Payments/Charges (which include a calculation for Make Whole Payments) were introduced as part of Trading and Settlement Code Part B. Unintended consequences of this calculation have led to significant Make Whole Payments to units with negative Imbalance revenue. A modification (Mod_34_18) to change the rules around Make Whole Payments for negative Imbalance revenue was approved by the SEM Committee, effective 27 January 2019. The calculation will be implemented in the Market Systems at a later date. The Imperfections Cost forecast includes an estimate for Make Whole Payments. Make Whole Payments are not subject to the incentive process.

[3] Includes Other System Charges up to December 2018, as published at www.eirgridgroup.com.

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

[5] 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>

[6] TCGs mean Transmission Constraint Groups or Operational Constraints as published at www.eirgridgroup.com.

[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 2018 to December 2018.

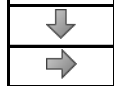
[9] The forecast and actual fuel and carbon costs were based on data taken from Thomson Reuters.

[10] The installed wind capacity is the November 2018 figure as published at www.eirgridgroup.com/how-the-grid-works/renewables, as full end of year data was not available at the time of publication.

[11] Increase from Forecast



Decrease from Forecast



No Change from Forecast

