

Quarterly Imperfections Cost Report

1st October 2017 - 31th December 2017



	2017/2018	2016/2017	2017/2018	2016/2017
	YTD Outturn (€m)	YTD Outturn (€m)	Q1 Outturn (€m)	Q1 Outturn (€m)
Dispatch Balancing Costs (DBC)	52.4	40.1	52.4	40.1
Make Whole Payments	1.5	0.5	1.5	0.5
Energy Imbalance	-0.8	0.3	-0.8	0.3
Other System Charges (OSC) [2]	-2.3	-2.4	-2.3	-2.4
Imperfections Costs Outturn	50.8	38.5	50.8	38.5
Imperfections Costs Forecast	53.6	37.8	53.6	37.8
Variance: Forecast Vs. Outturn	-2.8	0.7	-2.8	0.7
Variance % [3]	-5.2%	1.9%	-5.2%	1.9%

Key Points

- The Imperfections Costs Forecast are profiled based on the submitted model which assumed zero payments for both OSC and Energy Imbalances.
- The Imperfections Costs Outturn are 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.

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Key Factors Affecting Imperfections Costs	Forecast Assumptions for TY1718 ^[5]	Actual TY1718	Impact ^[11]			
Reserve Policy and TCGs ^[6]	Primary & Secondary Operating Reserve 75% LSI ^[7] TCG data as forecast per submission	SNSP trial at 65% started on 14th November; system inertia requirement increased from 20,000 MW to 23,000 MW for the trial. Volume of wind in NI with relays set to trip at 0.4 Hz/s during this quarter caused generation constraints on the island; volume reduced over the period as settings changes were made. A number of units bid in unanticipated Gas Product Charges in Northern Ireland.	•			
Reserve Provision	Data as per forecast submission	Minimum operating reserve in Ireland was at the increased level of 130 MW from 07:00 to 00:00 and 95 MW from 00:00 to 07:00 from 05/08/2017 until 27/10/2017 due to generator outages. After 27/10/2017, returned to 110MW and 75MW respectively.	•			
Regulatory Policy Changes	Data as per forecast submission	No change from forecast in this quarter.				
System Demand	Data as per forecast submission	Actual system demand was relatively consistent with the forecast and had a negligible impact on DBC over the quarter.	⇒			
Forced Generation Outages	Data as per forecast submission	Average actual rate for this quarter: 11.62% ^[8] .	•			
Scheduled Generation Outages	Data as per forecast submission	There were a few changes in the actual scheduled generation outages against those used in the forecast.	Ŷ			
Forced Transmission Outages	No outages forecast	There were no significant forced transmission outages during this period.	\Rightarrow			
Scheduled Transmission Outages	Data as per forecast submission	There were a number of changes in the actual scheduled outages against those used in the forecast.	•			

Commercial Offer data - Fuel Costs & Carbon ^[9]	Data as per forecast submission	Wholesale fuel prices for gas and coal were higher than forecast, therefore the cost of constraining on generation was higher and has increased DBC over the quarter. Gas: 18.7% higher than forecast, Coal c. 37% higher, Distillate c. 26% higher, Oil c. 3% higher and carbon was c. 57% higher.	•
Wind Variability	Data as per forecast submission	Installed Capacity at period end: 3,954 MW [10] Estimated Capacity Factor for Q1 2017/2018 was 31%. This was lower than the forecast wind capacity factor of 41%. Therefore this decreased DBC as more price making generators were in merit.	•

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Mitigation Measures

The following are a list of mitigation measures undergoing review to seek to increase downward pressure on Imperfection Cos

- 1. Daily review of Non-Compliances / Performance Monitoring events e.g. Trips;
- Weekly review of Imperfections costs and drivers;
- 3. Ongoing review of Reserve Policy and TCGs ^[6];
- Flexibility services as required;
- Grid Code review and modifications;
- 6. System Operator counter trading on the Interconnectors; and
- 7. EWIC export plan to reduce LSI.

Notes

- [1] Costs are actual initial settlement figures. There may be variations in the final figures as a result of resettlement or regulator approved derogations.
- [2] Other System Charges amounts as published at www.eirgridgroup.com.
- [3] Positive value indicates under forecast, Negative value indicates over forecast.
- [4] Imperfections Cost Forecast includes forecast for Make Whole Payments. Make Whole Payments are not subject to the incentive process.
- [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 Group 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] Percentage availability is an average of the Ireland October to December figures.
- [9] Fuel and Carbon Costs forecast and actual performance based on data taken from Thomson Reuters.
- [10] Installed capacity is as of end September 2017, end of year data not currently available
- [11] Increase from Forecast Decrease from Forecast No Change from Forecast

