

Quarterly Imperfections Cost Report

1st July 2016 - 30th September 2016



Costs ^[1]	2015/2016	2014/2015	2015/2016	2014/2015
Costs	YTD Outturn (€m)	YTD Outturn (€m)	Q3 Outturn (€m)	Q3 Outturn (€m)
Dispatch Balancing Costs (DBC)	121.2	140.6	22.0	22.1
Make Whole Payments	3.5	5.9	1.2	1.4
Energy Imbalance	-4.3	-3.5	-0.8	-0.3
Other System Charges (OSC) [2]	-7.5	-6.2	-1.7	-1.7
Imperfections Costs Outturn	112.9	134.6	20.7	21.5
Imperfections Costs Forecast	170.7	181.2	39.5	50.6
Variance: Forecast Vs. Outturn	57.8	46.6	18.8	29.1
Variance % [3]	33.9%	25.7%	47.6%	57.5%

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 TY1516 [5]	Actual TY1516	Impact ^[11]		
Reserve Policy and TCGs ^[6]	Primary & Secondary Operating Reserve 75% LSI ^[7] TCG data as forecast per submission	The removal of the temporary must-run of a unit in the North West Generation constraint helped mitigate DBC. The trial to relax the export constraints on EWIC helped reduce DBC.			
Reserve Provision	Data as per forecast submission	The provision of reserve from Short Term Active Response (STAR) was slightly lower than that forecast for this quarter, which increased DBC. An issue with reserve provision from an in-merit unit has also increased DBC.	î		
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 figures were slightly higher than forecast which decreased DBC.	1		
Forced Generation Outages	Data as per forecast submission	Average actual rate for this quarter: 6.07 ^[8]	\Rightarrow		
Scheduled Generation Outages	Data as per forecast submission	The scheduled outage of the Moyle Interconnector required units in Northern Ireland to be constrained on at times thus increasing DBC.	Ŷ		
Forced Transmission Outages	No outages forecast	The outage of a number of 220 kV cables in Dublin resulted in expensive generation being constrained on. The outage of EWIC also impacted generation at times. This resulted in an increase in DBC.	•		
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. The full impact will be identified as part of the incentive process.	>		
Commercial Offer data - Fuel Costs & Carbon ^[9]	Data as per forecast submission	All wholesale fuel prices were significantly lower than forecast for this quarter; Gas c. 30% lower, Coal c. 2% higher, Distillate c. 29% lower and Oil c. 38% lower and carbon was c. 31% lower. Therefore the cost of constraining on generation (i.e. Gas units) was lower than forecast, thus reducing DBC.			
Wind Variability	Data as per forecast submission	Installed Capacity at period end: 3109 MW ^[10] Estimated Capacity Factor: 24% ^[10] The wind capacity factor was lower than forecast during the quarter, which decreased DBC.	\$		

Mitigation Measures

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

- 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 review and modifications; and
- 6. System Operator counter trading on the Interconnectors.

Note

- [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 July to September figures.
- [9] Fuel and Carbon Costs forecast and actual performance based on data taken from Thomson Reuters.
- [10] Percentage capacity factor is estimated as the July September figures are currently not available. Figures to be published in All-Island Wind and Fuel Mix Summary Report.
- [11] Increase from Forecast Decrease from Forecast No Change from Forecast

