



Quarterly Imperfections Costs Report

1st October 2013 - 31st December 2013



Costs ^[1] (€m)	2013/2014 YTD Outturn €m	2012/2013 YTD Outturn €m	2013/2014 Q1 only €m	2012/2013 Q1 only €m
Dispatch Balancing Costs (DBC)	55.6	30.2	55.6	30.2
Make Whole Payments	0.8	0.0	0.8	0.0
Energy Imbalance	-0.3	-3.3	-0.3	-3.3
Other System Charges (OSC) ^[2]	-1.7	-2.0	-1.7	-2.0
Imperfections Costs Outturn	54.4	24.9	54.4	24.9
Imperfections Costs Forecast ^[3]	37.1	32.0	37.1	32.0
Variance: Forecast Vs. Outturn	-17.3	7.1	-17.3	7.1
Variance % ^[4]	-46.6%	22.1%	-46.6%	22.1%

Key Points

- The Imperfections Costs Forecast are included in the table above on a flat line basis^[3] 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 this flat line 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.

YTD 2013/2014

- DBC Outturn is 49.9% over the DBC Forecast^[5].
- Imperfections Costs Outturn 46.6% over the Imperfections Costs Forecast.



Key Factors Affecting Imperfections Costs	Forecast Assumptions for TY1314 ^[6]	Actual TY1314	Impact ^[14]
Reserve Policy and TCGs ^[7]	Primary & Secondary Operating Reserve 75% LIF ^[8] TCG data as per submission	No Reserve Policy change from forecast.	→
Reserve Provision	Data as per submission	There have been no significant changes to reserve provision. Static reserve provision from STAR sites was increased in December.	→
Regulatory Policy Changes	Data as per submission	No change from forecast	→
System Demand	Data as per submission	System demand has been in line with that forecast ^[9]	→
Forced Generation Outages	Data as per submission	Average actual rate (Q1): 8.1% ^[10]	→
Scheduled Generation Outages	Data as per submission	Generator outages had a minimal impact on DBC in the quarter.	→
Forced Transmission Outages	No outages forecast	The forced outage of 275kV, 220kV and 110kV circuits for several days in November increased DBC.	↑
Scheduled Transmission Outages	Data as per submission	The overrun of some scheduled transmission outages in the quarter increased DBC.	↑
Commercial Offer data - Fuel Costs & Carbon ^[13]	Data as per submission	All fuels are more expensive than forecast. Some out of merit gas generation has increased by up to 35% resulting in a substantial impact on DBC.	↑
Wind Variability	Installed Capacity at end of December 2013: 2432MW Capacity Factor: 31%	Installed Capacity at period end: 2376MW ^[9] Capacity Factor: 36% ^[9]	↑

Mitigation Measures

The following are a list of mitigation measures undergoing review to seek to manage Imperfection Costs:

- Daily review of Non-Compliances / Performance Monitoring events e.g. Trips;
- Weekly review of Imperfections costs and drivers;
- Ongoing review of Reserve Policy and TCGs^[7];
- Flexibility services as required; and
- Grid Code review and modifications.

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: <http://www.eirgrid.com/operations/ancillaryservicesothersystemcharges>
- [3] Imperfections Costs Forecast is weighted for TY1314: 44% of total for Q1 and Q2, 56% of total for Q3 and Q4.
- [4] Positive value indicates under forecast, Negative value indicates over forecast.
- [5] DBC Forecast is the Imperfections Cost Forecast excluding forecast Make Whole Payments.
- [6] Forecast is over an annual time horizon. Information and figures are for this period unless otherwise stated. Forecast assumptions are published at: <http://www.allislandproject.org/GetAttachment.aspx?id=0fc05d3e-c84e-4de8-8c35-254f681b2b8f>
- [7] TCGs mean Transmission Constraint Group or Operational Constraints as published at: http://www.eirgrid.com/media/OperationalConstraintsUpdateVersion1.10_December_2013.pdf
- [8] LIF means the Largest In Feed which is used in the calculation of the system reserve requirement.
- [9] Figures published in All-Island Wind and Fuel Mix Summary Report at: <http://www.eirgrid.com/operations/systemperformancedata/all-islandwindandfuelmixreport/>
- [10] Percentage availability is an average of the Ireland October to December figures. EirGrid Availability Reports are published at: <http://www.eirgrid.com/operations/systemperformancedata/availabilityreports>
- [11] CCGT: Combined Cycle Gas Turbine
- [12] OCGT: Open Cycle Gas Turbine
- [13] Fuel and Carbon Costs forecast and actual performance data based on the average first offer Price from the Generator Commercial Offer Data (COD) for all units.
- [14] Increase from Forecast  Decrease from Forecast  No Change from Forecast 