Quarterly Imperfections Costs Report

1st July 2013 - 30th September 2013

Costs [1] (€m)	2012/2013 Q4 YTD Outturn €m	2011/2012 Q4 YTD Outturn €m	2012/2013 Q4 only €m	2011/2012 Q4 only €m
Dispatch Balancing Costs (DBC)	155.6	129.2	39.0	23.2
Make Whole Payments	2.2	0.3	1.2	0.1
Energy Imbalance	-9.4	-5.8	-1.3	-2.0
Other System Charges (OSC) [2]	-6.5	-7.3	-1.4	-2.3
Imperfections Costs Outturn	**141.8**	**116.4**	**37.5**	**19.1**
Imperfections Costs Forecast [3]	142.2	142.7	40.5	35.9
Variance: Forecast Vs. Outturn	**0.4**	**26.3**	**2.9**	**16.8**
Variance % [4]	**0.3%**	**18.5%**	**7.3%**	**46.9%**

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 2012/2013

- DBC Outturn is 10% over the DBC Forecast[5].
- Imperfections Costs Outturn 0.3% under the Imperfections Costs Forecast. This variance is due to the differences between Outturn and Forecast for OSC and Energy Imbalances.

Key Factors Affecting Imperfections Costs	Forecast Assumptions for TY1213 [6]	Actual TY1213	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	Lower than anticipated static reserve due to a partial outage of an interconnector and a subsequent reduction in unused interconnector capacity.	↑
Regulatory Policy Changes	Data as per submission	No change from forecast	→
System Demand	Exported Generation 8.1TWh Transmission Peak 5104 MW	Exported Generation 8.3 TWh Tranmission Peak 5112 MW[9]	→
Forced Generation Outages	Average annual rate: 4.59%	Average actual rate (Q4): 7.2%[10]	↑
Scheduled Generation Outages	Data as per submission	In line with forecast. There were a number of additional outages which overall had minimal financial impact	→
Forced Transmission Outages	No outages assumed	There were a number of outages which overall had minimal financial impact	→
Scheduled Transmission Outages	Data as per submission	In line with forecast. There were 6 additional significant scheduled/forced extended outages	↑
Commercial Offer data - Fuel Costs & Carbon[13]	Data as per submission	Gas CCGT c.2.7% Higher Gas OCGT[12] c.0.6% Lower Coal c.30.1% Lower Oil c.3.2% Lower	↓
Wind Variability	Installed Capacity at end of September 2013: 2482MW Capacity Factor: 30%	Installed Capacity at period end: 2286MW[9] Capacity Factor: 19%[9]	↓

Mitigation Measures

The following are a list of mitigation measures undergoing review to seek to manage 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 [7];
4. Flexibility services as required; and
5. 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 TY1213: 43% of total for Q1 and Q2, 57% of total for Q3 and Q4. Imperfections Costs Forecast is flatline for TY1112

[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=59d7177d-696e-4bab-8271-68ccacf08235

[7] TCGs mean Transmission Constraint Group or Operational Constraints as published at:
http://www.eirgrid.com/media/OperationalConstraintsUpdate_v1.8_August2013.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 April to June 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 Generator Commercial Offer Data (COD) for all units. Variance % is actual vs forecast.

[14] Increase from Forecast ⬆ Decrease from Forecast ⬇ No Change from Forecast ➡