

## **Quarterly Imperfections Cost Report**

1st April 2015 - 30th June 2015



Costs <sup>[1]</sup>	2014/2015	2013/2014	2014/2015	2013/2014
	YTD Outturn (€m)	YTD Outturn (€m)	Q3 Outturn €m	Q3 Outturn (€m)
Dispatch Balancing Costs (DBC)	118.5	135.9	29.2	24.2
Make Whole Payments	4.5	3.2	1.5	1.7
Energy Imbalance	-3.2	-0.2	-1.9	0.1
Other System Charges (OSC) [2]	-4.5	-5.2	-1.1	-1.7
Imperfections Costs Outturn	115.3	133.7	27.7	24.3
Imperfections Costs Forecast [3]	130.6	119.2	50.1	45.9
Variance: Forecast Vs. Outturn	15.3	-14.5	22.4	21.6
Variance % [4]	11.7%	-12.1%	44.7%	47.1%

## **Key Points**

- The Imperfections Costs Forecast are included in the table above on a flat line basis<sup>[3]</sup> 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.

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Key Factors Affecting Imperfections Costs	Forecast Assumptions for TY1415 [6]	Actual TY1415	Impact <sup>[14]</sup>
Reserve Policy and TCGs <sup>[7]</sup>	Primary & Secondary Operating Reserve 75% LSI <sup>[8]</sup> TCG data as per submission	The refinement of the Transmission Constraint Groups (TCG) in Dublin has helped to reduce DBC during the tariff year.	<b>.</b>
Reserve Provision	Data as per submission	The provision of Interruptible Load during the quarter increased from 45 MW to 49 MW and this would have resulted in decreasing DBC.	
Regulatory Policy Changes	Data as per submission	No change from forecast in this quarter. NB The Gas Transportation Capacity (GTC) charges came into effect in Ireland from 01/10/2014. Provision has been made for this in the 2014/15 Imperfections forecast. Bid costs increased significantly due to the inclusion of the GTC.	<b>*</b>
System Demand	Data as per submission	System demand was in line with that forecast and did not have a significant impact on DBC over the quarter.	$\Rightarrow$
Forced Generation Outages	Data as per submission	Average actual rate for this quarter: 5.65 <sup>[9]</sup>	$\Rightarrow$
Scheduled Generation Outages	Data as per submission	There were no significant scheduled generator outages during this period.	$\Rightarrow$
Forced Transmission Outages	No outages forecast	There were no significant forced transmission outages during this period.	<b>⇒</b>
Scheduled Transmission Outages	Data as per submission	A number of scheduled outages in the Dublin region required the constrained running of an out of merit unit to help meet operational security requirements. This increased DBC.	•
Commercial Offer data - Fuel Costs & Carbon <sup>[10]</sup>	Data as per submission	Gas CCGT <sup>[11]</sup> c.2% Lower; Gas OCGT <sup>[12]</sup> c.2% Higher; Gas Thermal c. 2% Lower; Coal c.6% Higher; Oil c.18% Lower; Distillate c. 15% Lower. The actual bid prices of constrained on generation (i.e. Gas CCGT) is lower than forecast, therefore reducing DBC.  Flows on both interconnectors have changed significantly from 1st April due to the increase in the Carbon Price Floor in GB. This has led to a reduction in DBC.	•
Wind Variability	Data as per submission	Installed Capacity at period end: 2857 MW <sup>[13]</sup> Capacity Factor: 28% <sup>[13]</sup> The wind capacity factor was higher than forecast during the quarter, which increased DBC.	•

## 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;
- 2. Weekly review of Imperfections costs and drivers:
- 3. Ongoing review of Reserve Policy and TCGs [7];
- 4. Flexibility services as required;
- 5. Grid Code review and modifications; and
- 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: http://www.eirgrid.com/operations/ancillaryservicesothersystemcharges
- [3] Imperfections Costs Forecast is weighted for TY1415: 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] Imperfections Cost Forecast includes forecast for Make Whole Payments. Make Whole Payments are not subject to the incentive process
- [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-
- [7] TCGs mean Transmission Constraint Group or Operational Constraints as published at:
- http://www.eirgrid.com/operations/dispatchbalancingcosts/operationalconstraints/
- [8] LSI means the Largest Single Infeed which is used in the calculation of the system reserve requirement.
- [9] 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
- [10] 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.
- [11] CCGT: Combined Cycle Gas Turbine
- [12] OCGT: Open Cycle Gas Turbine
- [13] Percentage capacity factor is estimated as the April, May and June figures are currently not available. Figures to be published in All-Island Wind and Fuel Mix Summary Report at:
- http://www.eirgrid.com/operations/systemperformancedata/all-islandwindandfuelmixreport/
- [14] Increase from Forecast Decrease from Forecast No Change from Forecast

