

## **Quarterly Imperfections Cost Report**

1st January 2015 - 31st March 2015



Costs <sup>[1]</sup>	2014/2015	2013/2014	2014/2015	2013/2014
	YTD Outturn (€m)	YTD Outturn (€m)	Q2 Outturn €m	Q2 Outturn (€m)
Dispatch Balancing Costs (DBC)	89.3	111.7	47.9	56.1
Make Whole Payments	3.0	1.4	1.2	0.6
Energy Imbalance	-1.3	-0.3	-0.7	0.1
Other System Charges (OSC) [2]	-3.4	-3.4	-1.5	-1.7
Imperfections Costs Outturn	87.6	109.4	46.9	55.1
Imperfections Costs Forecast [3]	80.5	73.4	39.8	36.3
Variance: Forecast Vs. Outturn	-7.1	-36.0	-7.1	-18.8
Variance % [4]	-8.9%	-49.1%	-17.8%	-51.8%

## **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 Transmission Constraint Group (TCG) in Dublin required Huntstown HNC and/or Poolbeg CCGT to be constrained on over certain system loads. The voltage support requirement in the North West of Northern Ireland required the constrained on running of a unit at times. These increased DBC	<b>^</b>
Reserve Provision	Data as per submission	Great Island 4 was testing during this quarter which at times required increased reserve, however these costs are recovered through the Generator Testing Tariff.  The temporary reduction in Interruptible Load during the quarter would have resulted in increasing 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 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: 6.23 <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>\rightarrow</b>
Scheduled Transmission Outages	Data as per submission	There were no significant scheduled outages during this period	$\Rightarrow$
Commercial Offer data - Fuel Costs & Carbon <sup>[10]</sup>	Data as per submission	Gas CCGT <sup>[11]</sup> c.1% Lower Gas OCGT <sup>[12]</sup> c.24% Higher Gas Thermal c. 2% Lower Coal c.5% Higher Oil c.34% Lower Distillate c. 24% Lower The actual bid prices of in merit generation (i.e. Coal & Gas CCGT) were in line with forecast.	<b>⇒</b>
Wind Variability	Data as per submission	Installed Capacity at period end: 2857 MW <sup>[13]</sup> Capacity Factor: 39% <sup>[13]</sup> The wind capacity factor was higher than that forecast during the quarter, which increased DBC	•
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## 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:
- Ongoing review of Reserve Policy and TCGs <sup>[7]</sup>;
- Flexibility services as required;
- 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/aboutus/publications/
- [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 January to March 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 an average of the all-island January, February and March figures. Figures 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

