

Quarterly Imperfections Cost Report

1st July 2015 - 30th September 2015



| Costs ^[1] | 2014/2015 | 2013/2014 | 2014/2015 | 2013/2014 |
|----------------------------------|------------------|------------------|---------------|-----------------|
| | YTD Outturn (€m) | YTD Outturn (€m) | Q4 Outturn €m | Q4 Outturn (€m) |
| Dispatch Balancing Costs (DBC) | 140.6 | 157.5 | 22.1 | 21.6 |
| Make Whole Payments | 5.9 | 5.5 | 1.4 | 2.3 |
| Energy Imbalance | -3.5 | -0.7 | -0.3 | -0.5 |
| Other System Charges (OSC) [2] | -6.2 | -6.6 | -1.7 | -1.5 |
| Imperfections Costs Outturn | 136.8 | 155.7 | 21.5 | 21.9 |
| Imperfections Costs Forecast [3] | 181.2 | 165.6 | 50.6 | 46.4 |
| Variance: Forecast Vs. Outturn | 44.4 | 9.9 | 29.1 | 24.5 |
| Variance % [4] | 24.5% | 6.0% | 57.5% | 52.8% |

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.

| Key Factors Affecting Imperfections Costs | Forecast Assumptions for TY1415 [6] | Actual TY1415 | F4.41 |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| | | | Impact ^[14] |
| Reserve Policy and TCGs ^[7] | Primary & Secondary Operating Reserve 75% LSI ^[8] TCG data as forecast per submission | The refinement of the Transmission Constraint Groups (TCG) in Dublin has helped to reduce DBC during the tariff year. | . |
| Reserve Provision | Data as per forecast submission | There have been no significant changes to reserve provision. | \Rightarrow |
| Regulatory Policy Changes | Data as per forecast 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. | ⇒ |
| System Demand | Data as per forecast 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 forecast submission | Average actual rate for this quarter: 7.34 ^[9] | \Rightarrow |
| Scheduled Generation Outages | Data as per forecast 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. | ⇒ |
| Scheduled Transmission Outages | Data as per forecast submission | Transmission outages in the South region for part of this quarter restricted generation from the Cork harbour area, which increased DBC. | Ŷ |
| Commercial Offer data - Fuel Costs & Carbon ^[10] | Data as per forecast submission | Gas CCGT ^[11] c.1% Lower; Gas OCGT ^[12] c.7% Lower; Gas Thermal c. 2% Lower; Coal c.4% Higher; Oil c.42% Lower; Distillate c. 24% 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 forecast submission | Installed Capacity at period end: 2963 MW ^[13] Capacity Factor: 24% ^[13] The wind capacity factor was lower 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
- [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
- [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 July to September figures.
- [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 July, August and September figures are currently not available. Figures to be published in All-Island Wind and Fuel Mix Summary Report.
- [14] Increase from Forecast Decrease from Forecast No Change from Forecast

